



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, DC 20380-0001

MCO 1510.110
C 461
7 Apr 97

MARINE CORPS ORDER 1510.110

From: Commandant of the Marine Corps
To: Distribution List

Subj: INDIVIDUAL TRAINING STANDARDS FOR MARINES ASSIGNED TO AIR AND NAVAL
GUNFIRE LIAISON COMPANIES (ANGLICO)

Ref: (a) MCO 1553.1B

Encl: (1) Components of an ITS
(2) ITS Management
(3) Index of Tasks by Training Location, Level of Training,
Sustainment, and Grade to Standard
(4) COD on ITS Listing
(5) Training Support
(6) Individual Training Standards for Marines Assigned to Air and
Naval Liaison Companies

1. Purpose. To publish the ITS System for Marines assigned to Air and Naval
Gunfire Liaison Companies.

2. Background

a. The reference established the system used to publish all training
standards, provide policy, and assign responsibilities for applying the
Systems Approach to Training (SAT).

b. These ITS's provide a common base of training for all Marines who
are assigned to ANGLICO units. They provide the basis for the SAT of all
individual training. ITS's are to be used by institutional and unit
commanders to determine proficiency of individual Marines, to establish
training plans and courses of instruction, and to maintain a progressive and
systematic method to monitor training impacts on Individual Career
Development Plans.

c. ITS's are derived from Mission Performance Standards which come from
combat requirements of the Fleet Marine Forces. Changes to doctrine, force
structure, and the introduction of new weapons and equipment will require the
revision of this Order on a regular basis.

DISTRIBUTION STATEMENT A: Approved for public release; distribution is
unlimited.

3. Information

a. ITS's are to be used by institutional and unit commanders to design, develop, conduct, and evaluate their individual training of Marines. Institutional commanders will derive Terminal Learning Objectives (TLO) and Enabling Learning Objectives (ELO) from the tasks and performance steps set forth herein. Task lists reported on Course Descriptive Data (CDD) submissions will consist of task titles contained in this Order. Unit commanders will use the tasks contained in this Order as the basis of individual training in their long range, short range, and near term training plans.

b. The ITS system for ANGLICO Marines contains the following:

(1) Enclosure (1) contains the components of an ITS.

(2) Enclosure (2) sets forth the ITS management, as it relates to use and maintenance.

(3) Enclosure (3) is an index of tasks by training location, level of training, sustainment, and grade to standard.

(4) Enclosure (4) is a listing of tasks common to two or more MOS's in an OCCFLD and is not applicable in this Order.

(5) Enclosure (5) lists training support in four categories:

(a) Appendix A, Training Devices, Simulators, and Training Aids.

(b) Appendix B, Training Equipment.

(c) Appendix C, Ammunition, Explosives, and Pyrotechnics.

(d) Appendix D, Training Materials.

(6) Enclosure (6) lists ITS's for ANGLICO Marines.

4. Action

a. Commanding General, Marine Corps Combat Development Command (MCCDC)

(1) Ensure that all units and institutions are using this Order to train personnel to the standards required of their grade.

(2) Ensure that the Marine Corps Institute (MCI) and the Training and Audiovisual Support Centers (TAVSC) provide standardized job aids and other training support requirements to facilitate training in units.

(3) Review, revise, and manage the upkeep of this Order in coordination with Marine Force Commanders, MOS/OCCFLD sponsors and with subject matter experts.

(4) Ensure coordination occurs with the Commanding General, Marine Corps Systems Command (MARCORSYSCOM)

b. Commanding Generals of the Marine Force Commands and Supporting Establishment Commands; and Commanders of Separate Organizations not Commanded by a General Officer.

(1) Use this Order to implement the SAT process for ANGLICO training.


(2) Establish managed on-the-job-training (MOJT) programs to train Marines using the tasks to form the basis of initial, sustainment, or refresher training proficiencies for command training plans.

5. Submission of Recommendations and Eqq.

Recommendations concerning the contents of this Order are invited. Submit recommendations for change and recommended training requirements to the Commanding General, MCCDC (C461) via the appropriate chain of command.

6. Mobilization. All ITS's in this Order will remain in effect during mobilization.

7. Reserve Applicability. This Order is applicable to the Marine Corps Reserve.


K. T. HOLCOMB
By direction

DISTRIBUTION: PCN 10201659100

Copt To: 7000110 (55)
7000144 (1)
7230004 (20)
8145005 (2)
8145001 (1)

COMPONENTS OF AN ITS

1. General. ITS's contain six components; task, condition(s), standard, performance steps, reference(s), and administrative instructions.

2. Alphanumeric System. Each ITS is identified by the MOS followed by a series of numbers which identify the Duty Area, and Task.

a. The MOS is identified by four Arabic numbers. The four numbers are the ones assigned to the MOS in the MCO P1200.7 (MOS Manual). For the PARACHUTING MOS, the numeric designators would be ANGL.X.X.

b. Duty areas are identified by ascending Arabic numerals and are numbered consecutively by MOS. The designator for the first duty area under MOS ANGL would be ANGL.1.X.

c. Tasks within a duty area are numbered consecutively. The first task under the first duty area of MOS ANGL is numbered ANGL.1.1. The second task under the third duty area of MOS ANGL is numbered ANGL.3.2, and so forth.

3. ITS Components

a. Task. The task describes what a Marine has to do. It is a clearly stated, performance oriented action requiring a learned skill. Knowledge or enrichment topics which are required for the performance of a specific task are included in the administrative instructions. This type of information may very well comprise a separate class with its own TLO/ELO, but is not a separate task.

b. Condition(s). The conditions set forth the real world or wartime circumstances in which the tasks are to be performed. This element of an ITS underscores "realism" in training. When resources or safety requirements limit the conditions, this should be stated. It is important to understand that the conditions set forth in this Order are the minimum, and may be adjusted when applicable.

c. Standard. A standard is inviolate. It is not guidance, but a very carefully worded statement which sets the proficiency level expected when the task is performed. The standard should summarize the performance steps.

d. Performance Steps. There must be at least two performance steps for each task. Performance steps specify actions required to fulfill the proficiency established by the standard.

e. Reference(s). Reference(s) are doctrinal publications which provide the authority vested in the performance steps and references. References should be publications which are readily available.

f. Administrative Instructions. Administrative instructions provide the trainer/instructor with special circumstances relating to the ITS such as safety, real world limitations, and knowledge or enrichment topics which may be a prerequisite to successful accomplishment of the ITS.

ENCLOSURE (1)

ITS MANAGEMENT

1. ITS Use

a. ITS's are the basis for all individual training in units and formal schools. Since ITS's are written for every MOS they specify every proficiency Marines are required to achieve as individuals in support of their unit combat missions.

b. ITS's provide measures of performance that must be used by unit commanders to both diagnose individual deficiencies and to evaluate training. Deficiencies should be recorded and scheduled on future training plans. ITS's which are mastered should be recorded in individual training records and scheduled for sustainment/refresher training in the future.

c. Institution commanders are responsible for providing instruction based on ITS's. These selected ITS's appear as tasks on item number 24 of the Course Descriptive Data (CDD). Using the SAT process, institutional commanders formulate Programs of Instruction (POI) which fulfill the requirements of the operating forces.

d. Unit and institution commanders must work in tandem so that individuals continue to receive instruction until mandated proficiencies are achieved. Individual training cannot and should not cease upon graduation from a formal school. Schools do not have the resources (people, time, money) to teach every ITS required for MOS proficiency. Unit commanders must recognize this and continue individual training. When Marines do achieve proficiencies, unit commanders must systematically record these proficiencies and establish periodic sustainment training according to the frequency set forth in enclosure (3).

2. ITS Maintenance

a. ITS's exist because of the threat. Changes which occur must be reflected in ITS's as a team effort of the formal schools, the operating forces, and staff agencies at Headquarters, U.S. Marine Corps and at the Marine Corps Combat Development Command. Changes in the threat, new weapons/equipment and doctrine will require new or updated training proficiencies.

b. ITS's are validated when they are used by institution and unit commanders. Changes can be initiated by units, institutions, or higher headquarters. In order to ensure quality training, ITS's must be updated continuously. Input will be systematically collected, staffed, and incorporated into ITS's at least annually.

c. ITS users should be critical of the ITS's as a whole as they support or fail to support a particular MOS.

d. Specific components of an ITS should also be examined for realism and pertinence.

e. ITS Management is dynamic. User maintenance is the key to refining proficiencies which best serve unit missions.

ENCLOSURE (2)

INDEX OF TASKS BY TRAINING LOCATION, LEVEL OF TRAINING, STATEMENT,
AND GRADE TO STANDARD

1. This enclosure identifies WHERE ITS's are taught, Training Location; the Level of Training regarding proficiency, "P" for preliminary, not to standard, and "S" for trained to standard; and the lowest grade required to demonstrate proficiency in each ITS.
2. The Training Location is either Formal School (FS) or MOJT.
3. Sustainment training is always the responsibility of the unit commander. The number in the MOJT column represents the number of months between evaluation or retraining to maintain the proficiency required by the standard.

TASK NUMBER	TASK	FS	MOJT	Grade	SUST
MOS ANGL, FIRE SUPPORT MAN					
ANGL.1.1	PERFORM PREJUMP TRAINING	S	3		PVT
ANGL.1.2	EXECUTE PREJUMP TRAINING FOR THE INTENTIONAL WATER JUMP	S	12		PVT
ANGL.1.3	OPERATIONS	S	3		PVT
ANGL.1.4	DON PARACHUTE, RESERVE, AND COMBAT EQUIPMENT FOR PARACHUTE OPERATIONS	S	3		PVT
ANGL.1.5	EXECUTE JUMP COMMANDS FOR FIXED WING AIRCRAFT	S	3		PVT
ANGL.1.6	EXECUTE JUMP COMMANDS FOR CH-53 AND CH-46	S	3		PVT
ANGL.1.7	EXECUTE JUMP COMMANDS FOR UH-1/UH-60	S	3		PVT
ANGL.1.8	DEMONSTRATE THE USE OF A STATIC LINE EXTENSION	S	3		PVT
ANGL.1.9	EXECUTE EXIT PROCEDURES FOR FIXED WING AIRCRAFT	P	S/3		PVT
ANGL.1.10	EXECUTE EXIT PROCEDURES FOR CH-53 AND CH-46	P	S/3		PVT
ANGL.1.11	EXECUTE EXIT PROCEDURES FOR UH-1/UH-60 AIRCRAFT	P	S/3		PVT
ANGL.1.12	EXECUTE THE FIVE POINTS OF PERFORMANCE	S	3		PVT
ANGL.1.13	MANEUVER THE MC1-1B/T-10 PARACHUTE	S	3		PVT
ANGL.1.14	PERFORM PARACHUTE LANDING FALL	S	3		PVT
ANGL.1.15	REACT TO ACCIDENTAL ACTIVATION OF RESERVE PARACHUTE INSIDE THE AIRCRAFT	S	3		PVT
ANGL.1.16	REACT TO TOTAL PARACHUTE MALFUNCTION AND A DELAYED OPENING	S	3		PVT
ANGL.1.17	REACT TO PARTIAL PARACHUTE MALFUNCTION	S	3		PVT
ANGL.1.18	REACT TO TWISTED RISERS AND SUSPENSION LINES	S	3		PVT
ANGL.1.19	REACT TO AVOID A COLLISION OR ENTANGLEMENT BETWEEN JUMPERS	S	3		PVT
ANGL.1.20	PERFORM EMERGENCY PROCEDURES FOR ENTANGLEMENT WITH MC1-1B/T-10 PARACHUTE	S	3		PVT
ANGL.1.21	PERFORM EMERGENCY PROCEDURES FOR A TREE LANDING	S	3		PVT
ANGL.1.22	PERFORM EMERGENCY PROCEDURES FOR A WATER LANDING	S	3		PVT
ANGL.1.23	PERFORM EMERGENCY PROCEDURES FOR A WIRE LANDING	S	3		PVT
ANGL.1.24	EXECUTE TOWED JUMPER PROCEDURE	S	3		PVT
ANGL.1.25	RECOVER FROM PARACHUTE DRAG DURING HIGH WIND CONDITIONS	S	3		PVT

TASK NUMBER	TASK	FS	MOJT	Grade SUST
ANGL.1.26.	IDENTIFY THE BUDDY-ASSIST METHOD OF RECOVERY	S	3	PVT
ANGL.1.27.	EXECUTE RECOVERY OF AIRBORNE EQUIPMENT ON DROP ZONES	S	3	PVT
ANGL.2.1.	ORIENT A MAP USING A LENSATIC COMPASS	S	3	PVT
ANGL.2.2.	LOCATE YOUR POSITION DURING A TERRAIN WALK	S	6	PVT
ANGL.2.3	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	S	6	PVT
ANGL.2.4	LOCATE POSITIONS IN A MOBILE ENVIRONMENT	S	6	PVT
ANGL.2.5	LOCATE POSITION ON A MAP OR GROUND BY RESECTION	P	S/6	PVT
ANGL.2.6	DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP	S	6	PVT
ANGL.2.7	LOCATE YOUR POSITION USING A PORTABLE LIGHTWEIGHT GLOBAL POSITIONING SYSTEM (GPS)	S	6	PVT
ANGL.2.8	NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER USING A PORTABLE LIGHTWEIGHT GLOBAL POSITIONING SYSTEM	S	6	PVT
ANGL.2.9	PREPARE A PANORAMIC TERRAIN SKETCH	S	6	PVT
ANGL.2.10	PREPARE AND ISSUE A PATROL WARNING ORDER	P	S/6	CPL
ANGL.2.11.	PREPARE AND ISSUE A PATROL ORDER AND ORDER ANNEXES	P	S/6	CPL
ANGL.2.12	PREPARE PATROL ROUTES AND OVERLAYS	P	S/6	CPL
ANGL.2.13	CONDUCT PATROL REHEARSALS	P	S/6	CPL
ANGL.2.14	CONDUCT PATROL INSPECTIONS	P	S/6	CPL
ANGL.2.15	ENTER AND EXIT FRIENDLY LINES VIA FOOT MOVEMENT	P	S/6	CPL
ANGL.2.16	CONTROL PATROL MOVEMENT	S	6	CPL
ANGL.2.17	CROSS DANGER AREAS	S	6	PVT
ANGL.2.18	EXECUTE IMMEDIATE ACTION DRILLS	S	6	PVT
ANGL.2.19	DIRECT IMMEDIATE ACTION DRILLS	P	S/6	CPL
ANGL.2.20	PERFORM SURVEILLANCE/OBSERVATION TECHNIQUES	S	6	PVT
ANGL.2.21	DIRECT ACTIONS AT THE OBJECTIVE AREA	P	S/6	PVT
ANGL.2.22	ESTABLISH A PATROL BASE	P	S/6	CPL
ANGL.2.23	CONDUCT AN INSERT/EXTRACT VIA HELICOPTER LANDING	P	S/12	PVT
ANGL.2.24	RAPPEL INSERT VIA HELICOPTER	P	S/12	PVT
ANGL.2.25	CONDUCT INSERTION/EXTRACTION VIA A SPECIAL PATROL INSERTION/EXTRACTION (SPIE) OPERATION	P	S/12	PVT
ANGL.2.26	CONDUCT INDIVIDUAL ROPE MANAGEMENT	P	S/12	PVT
ANGL.2.27	DIRECT A HELICOPTER LANDING/TAKEOFF	P	S/12	PVT
ANGL.2.28	STERILIZE LANDING ZONE	P	S/12	PVT
ANGL.2.29	GIVE A LANDING ZONE BRIEF	P	S/12	PVT
ANGL.2.30	SELECT LANDING ZONE FOR ROTARY WING AIRCRAFT	P	S/12	PVT

ENCLOSURE (3)

TASK NUMBER	TASK	FS	MOJT	Grade SUST
ANGL.2.31	ESTABLISH A LANDING ZONE (DAY/NIGHT)	P	S/12	PVT
ANGL.3.1	OPERATE THE AN/PRC-77 RADIO SET	S	12	PVT
ANGL.3.2	OPERATE AN/GRA-39 RADIO SET CONTROL GROUP	P	S/12	PVT
ANGL.3.3	OPERATE AN/PRC-104 RADIO SET	S	12	PVT
ANGL.3.4	OPERATE AN/MRC-138 RADIO SET	S	12	PVT
ANGL.3.5	OPERATE AN/MRC-110A RADIO SET	S	12	PVT
ANGL.3.6	OPERATE AN/MRC-145 RADIO SET	S	12	PVT
ANGL.3.7	OPERATE AN/PRC-113 RADIO SET	S	12	PVT
ANGL.3.8	OPERATE AN/VRC-83 RADIO SET	S	12	PVT
ANGL.3.9	OPERATE AN/PSC-3 MANPACK SATELLITE TERMINAL	P	S/12	PVT
ANGL.3.10	OPERATE AN/PRC-119A SINCGARS RADIO	S	12	PVT
ANGL.3.11	OPERATE MX-9331B/URC REGENERATIVE REPEATER	P	S/12	PVT
ANGL.3.12	OPERATE TSEC/KY-57 COMMUNICATION SECURITY EQUIPMENT	S	12	PVT
ANGL.3.13	OPERATE TSEC/KY-65 COMMUNICATION SECURITY SYSTEM, PARKHILL	S	12	PVT
ANGL.3.14	OPERATE TSEC/KYK-13 COMMUNICATIONS SECURITY EQUIPMENT	S	12	PVT
ANGL.3.15	OPERATE TSEC/KO1-18 COMMUNICATIONS SECURITY EQUIPMENT	S	12	PVT
ANGL.3.16	OPERATE TSEC/KYK-99 COMMUNICATIONS SECURITY EQUIPMENT	S	12	PVT
ANGL.3.17	OPERATE KL-43C COMMUNICATIONS SECURITY EQUIPMENT	P	S/6	PVT
ANGL.3.18	COMMUNICATE UTILIZING A TACTICAL ANTENNA (RC-292/oe-254)	P	S/12	PVT
ANGL.3.19	ERECT OE-254	S	12	PFC
ANGL.3.20	OPERATE AS-2259/GR HF TACTICAL ANTENNA	P	S/12	PVT
ANGL.3.21	CONSTRUCT LONG WIRE ANTENNA	P	S/12	PVT
ANGL.3.22	CAMOUFLAGE COMMUNICATIONS EQUIPMENT	P	S/12	PVT
ANGL.3.23	UTILIZE FIELD EXPEDIENT ANTENNA FOR HF AND VHF COMMUNICATIONS EQUIPMENT	P	S/12	PFC
ANGL.3.24	DIRECT REMEDIAL ELECTRONIC COUNTER-COUNTERMEASURES (ECCM) PROCEDURES	P	S/12	PVT
ANGL.3.25	PERFORM TROUBLESHOOTING PROCEDURES ON A FAULTY RADIO	S	12	PVT
ANGL.3.26	MAINTAIN CIRCUIT LOGS	P	S/12	PVT
ANGL.3.27	PREPARE COMMUNICATIONS ASSETS FOR EMBARKATION	P	S/12	PVT
ANGL.3.28	OPERATE TSEC/KYK-15 COMMUNICATIONS SECURITY EQUIPMENT	P	S/12	PVT
ANGL.3.29	UTILIZE CORRECT PROCEDURES TO ESTABLISH, ENTER, AND LEAVE A RADIO TELEPHONE NET	S	6	PVT
ANGL.3.30	UTILIZE NUMERICAL CIPHER AUTHENTICATION SYSTEM TO ENCODE, DECODE, AND AUTHENTICATE	S	6	PVT
ANGL.3.31	SEND MESSAGE USING NATO FORMAT	P	S/6	PVT
ANGL.3.32	OPERATE TA-312 AND TA-1 FIELD TELEPHONES	S	6	PVT

TASK NUMBER	TASK	FS	MOJT	Grade	SUST
ANGL.3.33	OPERATE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)	S	6	PVT	
ANGL.3.34	INITIATE OPERATOR'S MEACONING, INTRUSION, JAMMING, AND INTERFERENCE REPORTS (MIJI 1 AND 2)	S	6	PVT	
ANGL.3.35	COMMUNICATE USING PROPER RADIO TELEPHONE PROCEDURES	S	6	PVT	
ANGL.4.1	DETERMINE LOCATION WITH THE AN/GVS-5 LASER RANGE FINDER	S	6	PVT	
ANGL.4.2	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO KNOWN POINTS	S	6	PVT	
ANGL.4.3	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST	S	6	PVT	
ANGL.4.4	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS	S	6	PVT	
ANGL.4.5	DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING SELF-LOCATION PROCEDURE	S	6	PVT	
ANGL.4.6	DETERMINE LOCATION WITH THE SPECIAL OPERATION FORCES LASER MARKER (SOFLAM)	P	S/6	PVT	
ANGL.4.7	SELECT AN OBSERVATION POST AND PREPARE TO USE IT	S	6	PVT	
ANGL.4.8	PREPARE AN OBSERVATION POST FOR USE WHILE MULE EQUIPPED	S	6	PVT	
ANGL.4.9	PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	S	6	PVT	
ANGL.4.10	DETERMINE DIRECTION TO TWO TARGETS	S	6	PVT	
ANGL.4.11	PREPARE A VISIBILITY DIAGRAM	S	6	PVT	
ANGL.4.12	LOCATE A TARGET BY GRID COORDINATES	S	6	PVT	
ANGL.4.13	LOCATE A TARGET BY POLAR PLOT	S	6	PVT	
ANGL.4.14	LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	S	6	PVT	
ANGL.4.15	MEASURE ANGULAR DEVIATION WITH YOUR HAND	S	6	PVT	
ANGL.4.16	PREPARE THE DIGITAL COMMUNICATION TERMINAL (DCT) FOR OPERATION	P	S/3	PVT	
ANGL.4.17	ESTABLISH COMMUNICATIONS PARAMETERS WITH THE DCT	P	S/3	PVT	
ANGL.4.18	REPORT OBSERVER LOCATION WITH THE DCT	P	S/3	PVT	
ANGL.4.19	DETERMINE OBSERVER LOCATION WITH THE DCT	P	S/3	PVT	
ANGL.4.20	PREPARE THE BATTLEFIELD COMPUTER TERMINAL (BCT)/ LIGHTWEIGHT COMPUTER UNIT (LCU) SINGLE TERMINAL COMMAND POST (STOP) FOR OPERATIONS	P	S/3	PVT	
ANGL.4.21	PREPARE BCT/LCU DUAL TERMINAL COMMAND POST (DTCP) FOR OPERATIONS	P	S/3	PVT	
ANGL.4.22	ESTABLISH COMMUNICATION PARAMETERS WITH THE BCT/LCU	P	S/3	PVT	
ANGL.4.23	VERIFY BCT/LCU SETUP CONFIGURATIONS	P	S/3	PVT	
ANGL.4.24	VERIFY INITIALIZATION DATA WITH THE BCT/LCU	P	S/3	PVT	
ANGL.4.25	VERIFY THE INPUT OF THE COMMUNICATION RELATED MESSAGES WITH THE BCT/LCU	P	S/3	PVT	
ANGL.4.26	POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)	S	6	PVT	
ANGL.4.27	PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FSCC	S	6	PVT	

ENCLOSURE (3)

TASK NUMBER	TASK	FS MOJT Grade SUST
ANGL.4.28	SUBMIT A LIST OF TARGETS	S 6 PVT
ANGL.4.29	CONSOLIDATE/PROCESS FORWARD OBSERVER'S LISTS OF TARGETS	S 6 PVT
ANGL.4.30	PREPARE A TARGET BULLETIN (TARBUL)	S 6 PVT
ANGL.4.31	ADVISE THE SUPPORTED UNIT OF FRIENDLY AND ENEMY FIRE SUPPORT CAPABILITIES AND LIMITATIONS	S 6 PVT
ANGL.4.32	ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)	S 6 PVT
ANGL.5.1	REQUEST AND ADJUST AREA FIRE	S 6 PVT
ANGL.5.2	OPERATE THE GCP-1 (GROUND COMMANDER'S POINTER), OR INFRARED (JR) LASER LONG RANGE POINTER (LPI-30)	S 6 PVT
ANGL.5.3	OPERATE THE AN/GVS-5 LASER RANGE FINDER	S 6 PVT
ANGL.5.4	CONDUCT A FIRE MISSION WITH THE AN/GVS-5 LASER RANGE FINDER	S 6 PVT
ANGL.5.5	OPERATE THE SPECIAL OPERATIONS FORCES LASER MARKER (SOFLAM)	P S/6 PVT
ANGL.5.6	CONDUCT A FIRE MISSION USING THE SPECIAL OPERATIONS FORCES LASER MARKER (SOFLAM)	P 6 PVT
ANGL.5.7	CONDUCT A FIRE MISSION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)	S 6 PVT
ANGL.5.8	CONDUCT A REGISTRATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)	S 6 PVT
ANGL.5.9	CONDUCT A SUPPRESSION MISSION ON A PLANNED TARGET	S 6 PVT
ANGL.5.10	CONDUCT AN IMMEDIATE SUPPRESSION MISSION	S 6 PVT
ANGL.5.11	CONDUCT A FIRE FOR EFFECT MISSION	S 6 PVT
ANGL.5.12	CONDUCT AN ILLUMINATION MISSION	S 6 PVT
ANGL.5.13	CONDUCT A COORDINATED ILLUMINATION MISSION	S 6 PVT
ANGL.5.14	CONDUCT A MISSION USING CREEPING FIRE PROCEDURES	S 6 PVT
ANGL.5.15	CONDUCT A DANGER CLOSE FIRE MISSION	S 6 PVT
ANGL.5.16	CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY	S 6 PVT
ANGL.5.17	ADJUST FINAL PROTECTIVE FIRES	S 6 PVT
ANGL.5.18	CONDUCT AN IMMEDIATE SMOKE MISSION	S 6 PVT
ANGL.5.19	CONDUCT A QUICK SMOKE MISSION	S 6 PVT
ANGL.5.20	CONDUCT A DESTRUCTION MISSION	S 6 PVT
ANGL.5.21	CONDUCT A MISSION ON A MOVING TARGET	S 6 PVT
ANGL.5.22	SELECT AND LOCATE REGISTRATION POINTS	S 6 PVT
ANGL.5.23	CONDUCT EMERGENCY OBSERVER PROCEDURES	S 6 SGT
ANGL.5.24	REQUEST FIRE ON IRREGULARLY SHAPED TARGETS	S 6 PVT
ANGL.5.25	DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE	S 6 PVT
ANGL.5.26	CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION USING ARTILLERY	S 6 PVT

TASK NUMBER	TASK	FS	MOJT	Grade SUST
ANGL.5.27	PROCESS AN AREA FIRE MISSION WITH THE DIGITAL COMPUTER TERMINAL (DCT)	P	S/3	PVT
ANGL.5.28	PROCESS SPECIAL FIRE MISSIONS WITH THE DCT	P	S/3	PVT
ANGL.5.29	CONDUCT A PRECISION REGISTRATION WITH THE DCT	P	S/3	PVT
ANGL.5.30	CONDUCT A HIGH BURST (HB) OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH THE DCT	P	S/3	PVT
ANGL.5.31	REPORT ENEMY ACTIVITY BY USE OF THE AUTOMATED TERMINAL INDEX (ATI) MESSAGES WITH THE DCT	P	S/3	PVT
ANGL.5.32	TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE DCT	P	S/3	PVT
ANGL.5.33	REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE DCT	S	6	PVT
ANGL.5.34	INPUT A TARGET IN THE KNOWN TARGET FILE WITH THE DCT	P	S/3	PVT
ANGL.5.35	VERIFY DCT INITIALIZATION	P	S/3	PVT
ANGL.5.36	VERIFY DCT INPUT MESSAGES	P	S/3	PVT
ANGL.5.37	SUPERVISE PROCESSING OF A FIRE REQUEST FROM A DCT EQUIPPED BATTALION FSCC	P	3/3	PVT
ANGL.5.38	INPUT DATA INTO THE SUPPORT PROGRAM OF THE BCT/LCU	P	S/6	PVT
ANGL.5.39	INPUT DATA INTO THE AMMUNITION AND FIRE UNIT INFORMATION FILE OF THE BCT/LCU	P	S/3	PVT
ANGL.5.40	VERIFY ENTRIES MADE INTO THE SUPPORT PROGRAM OF THE BCT/LCU	P	S/3	PVT
ANGL.5.41	VERIFY THE INPUT OF AMMUNITION AND FIRE UNIT INFORMATION IN THE BCT/LCU	P	S/3	PVT
ANGL.5.42	INPUT COMMANDERS CRITERIA INFORMATION IN THE BCT/LCU	P	S/3	PVT
ANGL.5.43	PROCESS A FIRE MISSION REQUEST WITH THE BCT/LCU	P	S/3	PVT
ANGL.5.44	PROCESS A SPECIAL FIRE MISSION REQUEST WITH THE BCT/LCU	P	S/3	PVT
ANGL.5.45	VERIFY THE INPUT OF COMMANDER'S CRITERIA INFORMATION IN THE BCT/LCU	P	S/3	PVT
ANGL.5.46	SUPERVISE THE PROCESSING OF A FIRE MISSION REQUEST WITH THE BCT/LCU	P	S/6	PVT
ANGL.5.47	SUPERVISE THE PROCESSING OF SPECIAL FIRE MISSION REQUESTS WITH THE BCT/LCU	P	S/6	PVT
ANGL.5.48	PROCESS TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE BCT/LCU	P	S/3	PVT
ANGL.5.49	MODIFY THE ATI MODE 3 MODIFICATION FILE OF THE BCT/LCU	P	S/3	PVT
ANGL.5.50	SUPERVISE PROCESSING OF TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE BCT/LCU	P	S/3	PVT
ANGL.5.51	VERIFY THE MODIFICATION OF ATI MODE 3 RELATED MESSAGES WITH THE BCT/LCU	P	S/3	PVT
ANGL.5.52	COMPUTE A NON-NUCLEAR FIRE PLAN WITH THE BCT/LCU	P	S/3	PVT
ANGL.5.53	COMPUTE A FASCAM FIRE PLAN WITH THE BCT/LCU	P	S/3	PVT
ANGL.5.54	DIRECT THE BUILDING AND COMPUTATION OF A NON-NUCLEAR FIRE PLAN WITH THE BCT/LCU	P	S/3	PVT
ANGL.5.55	DIRECT THE BUILDING AND COMPUTATION OF A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE BCT/LCU	P	S/3	PVT
ANGL.5.56	DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE BCT/LCU	P	S/3	PVT

ENCLOSURE (3)

TASK NUMBER	TASK	FS	MOJT	Grade SUST
ANGL.5.57	DIRECT THE PREPARATION AND MAINTENANCE OF THE MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) FILE MANAGEMENT SYSTEM WITH THE BCT/LCU	P	S/3	PVT
ANGL.5.58	CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION	S	3	PVT
ANGL.5.59	ADJUST NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.60	CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.61	CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION USING NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.62	CONDUCT A DANGER CLOSE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.63	CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION USING MEAN POINT OF IMPACT (MPI) ADJUSTMENTS	S	6	PVT
ANGL.5.64	RECORD A NAVAL SURFACE FIRE SUPPORT TARGET AS A TARGET	S	6	PVT
ANGL.5.65	REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.66	CONDUCT A NAVAL SURFACE FIRE SUPPORT MISSION USING TIME FUZES IN EFFECT	S	6	PVT
ANGL.5.67	CONDUCT AN ILLUMINATION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.68	CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.69	CONDUCT A SIMULTANEOUS TARGET MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.70	CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.71	CONDUCT A DESTRUCTION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	S	6	PVT
ANGL.5.72	MAINTAIN INFORMATION ON FIRE SUPPORT STATUS CHART	S	6	PVT
ANGL.5.73	PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST	S	6	PVT
ANGL.5.74	DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN	S	6	PVT
ANGL.5.75	LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM	S	6	PVT
ANGL.5.76	PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE QUICK CRATERS	S	6	PVT
ANGL.5.77	PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE DELAY CRATERS	S	6	PVT
ANGL.5.78	PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS	S	6	PVT
ANGL.5.79	PERFORM SHELL FRAGMENT ANALYSIS	S	6	PVT
ANGL.5.80	SUBMIT <u>STANDARD</u> SHELLING, MORTARING, AND BOMBING REPORT	S	6	PVT

TRAINING SUPPORT

1. This enclosure identifies training support in four categories for each MOS or the OCCFLD as a whole. Some of the support items are identified by tasks, groups of tasks, or for the entire task list as follows:

Appendix A: Training Devices, Simulators, and Training Aids

Appendix B: Training Equipment

Appendix C: Ammunition, Explosives, and Pyrotechnics

Appendix D: Training Materials

2. If support identified in any appendix does not apply, the appendix will be included stating: "DOES NOT APPLY TO THIS MOS/OCCFLD."

ENCLOSURE (5)

TRAINING DEVICES, SIMULATORS, AND TRAINING AIDS

Below is a minimum list of those training devices, simulators, and training aids that can be used.

Audio Visual Aids (overhead projectors, slide projectors, film projectors, video cassette recorders)
Easle Board and Charts
Mine Replicas and Charts
Weapons Replicas and Charts
Threat Vehicle Replicas and Charts
Rappelling Tower or Cliff
Mouflage Kits
MILES
Tactical Report Formats
Threat Weapon replicas and charts
Maintenance Forms
Usable Fuze Quick Artillery Crater (low and high angle)
Usable Fuze Furrow
DIA Projectile Fragmentation Identification Guide
Artillery Projectile Fragments
Artillery Safety "T"
Direct Fire Target
Range Cards
Gunner's Reference Card
GTA - Foreign Fragment Identification Guide
GTA 6-7-3, Observed Fire (OF) Fan
Ballistic Met Message
Computer Met Message
Registration Point Corrections
Calibrated Muzzle Velocities
Plaintext and Encoded Messages
Meter Factor Nomograph
Weight Tables
Air Weather Service (AWS) Message
Radiosonde Recorder Chart
Survey Data (Trig Lists)
Baroswitch Pressure Calibration Chart

Appendix A to
ENCLOSURE (5)

TRAINING EQUIPMENT

Individual Weapons

M9 9mm Service Pistol
M16A2 Service Rifle
M203 Grenade Launcher
Knife/Bayonet

Vehicles

M998 HMMWV

Communication Material/Equipment

AN/PRC-77, Radio Set
AN/PRC-68, Radio Set
AN/PRC-104, Radio Set
AN/GRC-160, Radio Set
AN/MRC-110, Radio Set
AN/MRC-138, Radio Set
AN/PRC-119, Radio Set
AN/MRC-145, Radio Set
AN/GRA-39, Radio Remote
AN/PPN-19, Transponder Set
AN/UPN-32, Transponder Set, Radar Beacon
AN/U?K-102 (LCU), ISFAS
AN/VRC-46, Radio Set
AN/PSC-2, Digital Communications Terminal
AN/PSC-3, Satellite Communications Set
AN/VRC-12, Series Radio Set
TSEC/KY-65, Parkhill Speech Security Equipment
TSEC/KY-57, Vinson Speech Security Equipment
KYK-13
Kr-ss
KL-43C
TA-312/PT, Field Phone
TA-1A, Field Phone
KTC-1400, Numerical Cipher/Authentication System
KTC-600, Tactical Operations Code
CEOI, Communications-Electronic Operation Instructions
AKAK 1662
AKAK 130
AKAK 874
AMSC 608
KAC 61B
All Current CMS Software Used
MX-9331 B/URC, Regenerative Repeater
MK-456/GRC, Retransmission Kit
DR-8
H-200, Headset
TA-125, Terminal Box
RC-292, Antenna
OE-254/GRC, Antenna Group
MT-1029, Mount
WD-1/TT, Wire
Field Wire Tool Kit
NAVMC 964, Message Book
Radio Time Signal Receiver
AT-784, Homing Loop Antenna
TE-33, Tool Kit
H-182/U/H-144/U, Headset
Deicing Screen
Trichloroethene
Lint Free Cloth with Brush

Motor Transport Equipment

Fluids
Lubricants
Lubrication Orders

Artillery Ammunition

Separate Loading Ammunition

Appendix B to
ENCLOSURE (5)

MCO 1510.110
7 Apr 97

Semi-Fixed Ammunition
Primers
Propellant
Fuzes

Naval Gunfire Ammunition

5-inch/54 Ammunition with Various Fuzes

Fire Support Coordination Equipment

Fire Support Status Chart
Operations Order with Appendix 12
Acetate
Plotting Equipment
Target List Worksheet
Intelligence Summary
Joint Tactical Air Request (JTAR) Form
Shell Reports
Visibility Diagrams
High Payoff Target Matrix
Attack Guidance Matrix
Graphic Munitions Effectiveness Table (GMET)
Joint Munitions Effectiveness Manuals (JMEM)
Situation Overlay

Laser Range Finder Equipment

AN/GVS-5, Laser Range Finder
AN/PEQ-1, Special Operations Forces Laser Marker (SOFLAM)
AN/PAq-3, Modular Universal Laser Equipment with: Stabilized Tracking Tripod
Module
(STTM), North Finding Module (NFM), Laser Designator Range Finder Module
(LDRFM)

Parachuting Equipment

Fragmentation Protective Helmet
Retention Straps for Protective Helmet
Parachutist's Shock Pad
M-1950 Weapons Container
HPT Lowering Line
H-harness w/D-ring Attaching Straps or Harness Single Point Release
K-Bar "/Day/Night Flare or Bayonet
ID Card and Identification Tags
Fifty Feet of "550" Cord
MC1-1B Parachute
MC1-1C Parachute
T-10 Parachute
T-10 Reserve Parachute
Mock Aircraft Door/Ramp
Static Line Extension
C-130 Aircraft
C-141 Aircraft
CH-53 Aircraft
CH-46 Aircraft
UH-1 Aircraft
UH-60 Aircraft
Parachute Landing Fall (PLF) Training Area
Suspended Harness Trainer

Individual Tactical Skills Equipment

782 Gear
Compass, Lensatic
Global Positioning System (GPS) Receiver
Military Map 1:50,000 Scale
Overlay Paper
Coordinate Scale and Protractor
Night Vision Device AN/PVS-4, 5 or 7
Binocular M13AS, 6X30
Flashlight with Filter Lens
Rope, Manila, 1/4 inch diameter
Locking Snaplink STUBAI-85
LPL-30
GCP-1A
Patrol Warning Order Format
PLGR

Appendix B to
ENCLOSURE (5)

Five Paragraph Order Format
Defensive Overlay with Barrier Plan

HRST Equipment

SPIE Harness
Protective Goggles
Aircraft Direction Wands
Landing Zone Brief Format
120 Foot Military Green Line
Rappel Tower Capable of Supporting Both Rappelling and Fast-Roping

Cleaning Equipment

Brush, Cleaning
Lens Tissue
Rifle Bore Cleaner
Dry-Cleaning Solvent
Clean Rags

Appendix B to
ENCLOSURE (5)

AMMUNITION, EXPLOSIVES, AND PYROTECHNICS

This appendix identifies ammunition, explosives, and pyrotechnics (CLASS V) requirements for a task.

- The first column is the Task Number.
- The second column identifies the Department of Defense Identification Code (DODIC).
- The third column is the nomenclature pertaining to the DODIC.
- The fourth column, "Initial Proficiency", identifies the quantity of CLASS V each trainee will expend to achieve initial proficiency in this task.
- The fifth column, "Per Iteration", Lists the quantity of CLASS Y expended to maintain proficiency after initial proficiency is achieved.
- The sixth column, "Annual Sustainment", provides the amount of CLASS V required for one Marine to maintain proficiency in this task for one year. Annual sustainment quantities are derived by the following formula:

Twelve Months Divided by Sustainment Factor Times Per Iteration
Equals Annual Sustainment

Example: Take the sustainment factor from Enclosure (3). Divide this number into twelve months to find out how many times per year a task must be re-evaluated or retrained:

- * Task ANGL.5.10 has a sustainment factor of 6.
- * This number divided into twelve, tells you the task has to be retrained two times a year (every six months).
- * Multiply two times the "per iteration" factor to find the annual sustainment quality.

12 Months/6X4=8

It takes eight, 155mm HE rounds to maintain proficiency in this task every year.

Note: The following listings of ammunition requirements represent the minimum needed to meet the standards for the tasks which require the use of CLASS V (Ammunition) items. It is recommended that the training of the ITS's in this Order be further enhanced with additional ordnance (pyrotechnics, blast and artillery simulators, mine simulators, blank ammunition, etc.), whenever possible to more closely approximate reality.

TASK	DODIC	NOMENCLATURE	INITIAL PROFICIENCY	PER ITERATION	ANNUAL SUSTAINMENT
ANGL.4.3	D544	155mm M107 HE	2	2	4
	N335	M557 PD SQ/D OR	2	2	4
	N340	M739 PD SQ/D	2	2	4
	D540	155mm M3 series, green bag, with zones 1 through 5 OR	2	2	4
	D541	155mm M4 series, white bag, with zones 3 through 7	2	2	4
	N523	Primer Percussion M82	2	2	4
ANGL.4.4	D544	155mm M107 HE	3	3	6
	N335	M557 PD SQ/D OR	3	3	6
	N340	M739 PD SQ/D	3	3	6
	D540	155mm M3 series, green bag, with zones 1 through 5 OR	3	3	6
	D541	155mm M4 series, white bag, with zones 3 through 7	3	3	6
	N523	Primer Percussion M82	3	3	6
ANGL.4.19	D544	155mm M107 HE	7	7	14
	N335	M557 PD SQ/D OR	7	7	14
	N340	M739 PD SQ/D	7	7	14
	D540	155mm M3 series, green bag, with zones 1 through 5 OR	7	7	14
	D541	155mm M4 series, white bag, with zones 3 through 7	7	7	14
	N523	Primer Percussion M82	7	7	14
ANGL.5.1	D544	155mm M107 HE	7	7	14
	N335	M557 PD SQ/D OR	7	7	14
	N340	M739 PD SQ/D	7	7	14
	D540	155mm M3 series, green bag, with zones 1 through 5 OR	7	7	14
	D541	155mm M4 series, white bag, with zones 3 through 7	7	7	14

	N523	Primer Percussion M82	7	7	14
ANGL.5.3	D544	155mm M107 HE	5	5	10
	N335	M557 PD SQ/D OR	5	5	10
	N340	M739 PD SQ/D	5	5	10
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			5	5	10
	D541	155mm M4 series, white bag, with zones	3 through 7		
			5	5	10
	N523	Primer Percussion M82	5	5	10
ANGL.5.5	D544	155mm M107 HE	5	5	10
	N335	M557 PD SQ/D OR	5	5	10
	N340	M739 PD SQ/D	5	5	10
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			5	5	10
	D541	155mm M4 series, white bag, with zones	3 through 7		
			5	5	10
	N523	Primer Percussion M82	5	5	10
ANGL.5.6	D544	155mm M107 HE	5	5	10
	N335	M557 PD SQ/D OR	5	5	10
	N340	M739 PD SQ/D	5	5	10
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			7	7	14
	D541	155mm M4 series, white bag, with zones	3 through 7		
			7	7	14
	N523	Primer Percussion M82	7	7	14
	D510	155mm M712 Copperhead	2	2	4
ANGL.5.7	D544	155mm M107 HE	7	7	14
	N335	M557 PD SQ/D OR	7	7	14
	N340	M739 PD SQ/D	7	7	14
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			7	7	14
	D541	155mm M4 series, white bag, with zones	3 through 7		
			7	7	14
	N523	Primer Percussion M82	7	7	14
ANGL.5.8	D544	155mm M107 HE	4	4	8
	N335	M557 PD SQ/D OR	4	4	8
	N340	M739 PD SQ/D	4	4	8
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			4	4	8
	D541	155mm M4 series, white bag, with zones	3 through 7		
			4	4	8
	N523	Primer Percussion M82	4	4	8
ANGL.5.9	D544	155mm M107 HE	8	8	16
	N335	M557 PD SQ/D OR	4	4	8
	N340	M739 PD SQ/D	4	4	8
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			8	8	16
	D541	155mm M4 series, white bag, with zones	3 through 7		
			8	8	16
	N523	Primer Percussion M82	8	8	16
	N464	VT M732 OR	4	4	8
	N463	VT M728	4	4	8
ANGL.5.10	D544	155mm M107 HE	4	4	8
	N335	M557 PD SQ/D OR	4	4	8
	N340	M739 PD SQ/D	4	4	8
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			4	4	8
	D541	155mm M4 series, white bag, with zones	3 through 7		
			4	4	8
	N523	Primer Percussion M82	4	4	8
ANGL.5.11	D505	155mm M485 Illum	4	4	8
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			4	4	8
	D541	155mm M4 series, white bag, with zones	3 through 7		
			4	4	8
	N248	MT M565 OR	4	4	8
	N285	MT M577	4	4	8
	N523	Primer Percussion M82	4	4	8
ANGL.5.12	D505	155mm M485 Illum	7	7	14
	N248	MT M565 OR	7	7	14
	N285	MT M577	7	7	14
	D544	155mm M107 HE	7	7	14
	N335	M557 PD SQ/D OR	7	7	14
	N340	M739 PD SQ/D	7	7	14
	D540	155mm M3 series, green bag, with zones	1 through 5	OR	
			14	14	28
	D541	155mm M4 series, white bag, with zones	3 through 7		
			14	14	28
	N523	Primer Percussion M82	14	14	28

ANGL.5.13	D544	155mm M107 HE	6	6	12
	N335	M557 PD SQ/D OR	6	6	12
	N340	M739 PD SQ/D	6	6	12
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	6	6	12
	D541	155mm M4 series, white bag, with zones 3 through 7			
			6	6	12
ANGL.5.14	N523	Primer Percussion M826		6	12
	D544	155mm M107 HE	6	6	12
	N335	M557 PD SQ/D OR	6	6	12
	N340	M739 PD SQ/D	6	6	12
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	6	6	12
	D541	155mm M4 series, white bag, with zones 3 through 7			
ANGL.5.15			6	6	12
	N523	Primer Percussion M826		6	12
	D544	155mm M107 HE	14	14	28
	N335	M557 PD SQ/D OR	14	14	28
	N340	M739 PD SQ/D	14	14	28
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	14	14	28
ANGL.5.16	D541	155mm M4 series, white bag, with zones 3 through 7			
			14	14	28
	N523	Primer Percussion M82 14 14		28	
	D544	155mm M107 HE	16	16	32
	N335	M557 PD SQ/D OR	16	16	32
	N340	M739 PD SQ/D	16	16	32
	D540	155mm M3 series, green bag, with zones 1 through 5			
ANGL.5.17		OR	16	16	32
	D541	155mm M4 series, white bag, with zones 3 through 7			
			16	16	32
	N523	Primer Percussion M82 16		16	32
	D528	155mm M825 Smoke	4	4	8
	D550	155mm M110A1 WP	1	1	2
	D506	155mm M116A1 HC	3	3	6
ANGL.5.18	N335	M557 PD SQ/D OR	1	1	2
	N340	M739 PD SQ/D	1	1	2
	N276	MTSQ M501A1	3	3	6
	N285	MT577	4	4	8
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	8	8	16
	D541	155mm M4 series, white bag, with zones 3 through 7			
ANGL.5.19			8	8	16
	N523	Primer Percussion M82 8		8	16
	D528	155mm M825 Smoke	12	12	24
	D550	155mm M110A1 WP	12	12	24
	D506	155mm M116A1 HC	12	12	24
	D544	155mm M107 HE	3	3	6
	N335	M557 PD SQ/D OR	15	15	30
ANGL.5.20	N340	M739 PD SQ/D	15	15	30
	N276	MTSQ M501A112	12	24	
	N285	MT577	12	12	24
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	39	39	78
	D541	155mm M4 series, white bag, with zones 3 through 7			
			39	39	78
ANGL.5.21	N523	Primer Percussion M82 39		39	78
	D544	155mm M107 HE	13	13	26
	N335	M557 PD SQ/D OR	13	13	26
	N340	M739 PD SQ/D	13	13	26
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	13	13	26
	D541	155mm M4 series, white bag, with zones 3 through 7			
ANGL.5.22			13	13	26
	N523	Primer Percussion M82 13		13	26
	D544	155mm M107 HE	7	7	14
	N335	M557 PD SQ/D OR	7	7	14
	N340	M739 PD SQ/D	7	7	14
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	7	7	14
ANGL.5.23	D541	155mm M4 series, white bag, with zones 3 through 7			
			7	7	14
	N523	Primer Percussion M82 7		7	14
	D544	155mm M107 HE	12	12	24
	N335	M557 PD SQ/D OR	6	6	12
	N340	M739 PD SQ/D	6	6	12
	N278	MTSQ M564 OR	6	6	12
ANGL.5.24	N286	MTSQ M582	6	6	12
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	12	12	24

	D541	155mm M4 series, white bag, with zones 3 through 7			
		12	12	24	
	N523	Primer Percussion M82 12	12	24	
ANGL.5.23	D544	155mm M107 HE	10	10	20
	N335	M557 PD SQ/D OR	10	10	20
	N340	M739 PD SQ/D	10	10	20
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	10	10	20
	D541	155mm M4 series, white bag, with zones 3 through 7			
		10	10	20	
ANGL.5.24	N523	Primer Percussion M82 7	7	14	
	D544	155mm M107 HE	8	8	16
	D505	155mm M485 Illum	2	2	4
	D550	155mm M110A1 WP	2	2	4
	N335	M557 PD SQ/D OR	10	10	20
	N340	M739 PD SQ/D	10	10	20
	N248	MT M565 OR	2	2	4
ANGL.5.25	N285	MT577	2	2	4
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	12	12	24
	D541	155mm M4 series, white bag, with zones 3 through 7			
		12	12	24	
	N523	Primer Percussion M82 12	12	24	
ANGL.5.27	D544	155mm M107 HE	8	8	16
	D505	155mm M485 Illum	2	2	4
	D550	155mm M110A1 WP	2	2	4
	N335	M557 PD SQ/D OR	10	10	20
	N340	M739 PD SQ/D	10	10	20
	N248	MT M565 OR	2	2	4
	N285	MT577	2	2	4
ANGL.5.28	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	12	12	24
	D541	155mm M4 series, white bag, with zones 3 through 7			
		12	12	24	
	N523	Primer Percussion M82 12	12	24	
ANGL.5.29	D544	155mm M107 HE	16	16	32
	N335	M557 PD SQ/D OR	16	16	32
	N340	M739 PD SQ/D	16	16	32
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	16	16	32
	D541	155mm M4 series, white bag, with zones 3 through 7			
		16	16	32	
ANGL.5.58	N523	Primer Percussion M82 16	16	32	
ANGL.5.59	D544	155mm M107 HE	11	11	22
	N335	M557 PD SQ/D OR	11	11	22
	N340	M739 PD SQ/D	11	11	22
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	11	11	22
	D541	155mm M4 series, white bag, with zones 3 through 7			
		11	11	22	
ANGL.5.60	N523	Primer Percussion M82 11	11	22	
Appendix C to ENCLOSURE (5)	D544	155mm M107 HE	8	8	16
	N335	M557 PD SQ/D OR	8	8	16
	N340	M739 PD SQ/D	8	8	16
	N278	MTSQ M564 OR	8	8	16
	N286	MTSQ M582	8	8	16
	D540	155mm M3 series, green bag, with zones 1 through 5			
		OR	8	8	16
5-C-4	D541	155mm M4 series, white bag, with zones 3 through 7			
		8	8	16	
	N523	Primer Percussion M82 8	8	16	
5-C-4	D339	5-inch/54 PD OR	7	7	14
	D339	5-inch/54 PD	3	3	6
	D295	5-inch/54 HE CVT OR	4	4	8
	D338	5-inch/54 HE MT OR	4	4	8
	D313	5-inch/54 WP PD OR	4	4	8
	D314	5-inch/54 WP MT	4	4	8
5-C-4	D326	5-inch/54 HE fuze quick 4	4	8	
	D292	5-inch/54 HE fuze CVT 10	10	20	
5-C-4	D339	5-inch/54 PD OR	7	7	14
	D339	5-inch/54 PD	3	3	6
	D295	5-inch/54 HE CVT OR	4	4	8
	D338	5-inch/54 HE MT OR	4	4	8
	D313	5-inch/54 WP PD OR	4	4	8
	D314	5-inch/54 WP MT	4	4	8

ANGL.5.61	D313	5-inch/54 WP PD OR	1	1	2
	D353	5-inch/54 Illum OR	1	1	2
	D354	5-inch/54 Illum	1	1	2
	D339	5-inch/54 HE PD OR	8	8	16
	D295	5-inch/54 HE CVT OR	8	8	16
	D338	5-inch/54 HE MT	8	8	16
ANGL.5.62	D339	5-inch/54 PD OR	10	10	20
	D339	5-inch/54 PD	6	6	12
	D295	5-inch/54 HE CVT OR	4	4	8
	D338	5-inch/54 HE MT OR	4	4	8
	D313	5-inch/54 WP PD OR	4	4	8
	D314	5-inch/54 WP MT	4	4	8
ANGL.5.63	D339	5-inch/54 PD OR	11	11	22
	D339	5-inch/54 PD	3	3	6
	D295	5-inch/54 HE CVT OR	8	8	16
	D338	5-inch/54 HE MT OR	8	8	16
	D313	5-inch/54 WP PD OR	8	8	16
	D314	5-inch/54 WP MT	8	8	16
ANGL.5.64 ** AMMUNITION FOR THIS TASK IS ACCOUNTED FOR IN OTHER ANGL TASKS					
ANGL.5.65	D339	5-inch/54 PD	4	4	8
	D295	5-inch/54 HE CVT OR	4	4	8
	D338	5-inch/54 HE MT OR	4	4	8
	D313	5-inch/54 WP PD OR	4	4	8
	D314	5-inch/54 WP MT	4	4	8
ANGL.5.66	D339	5-inch/54 PD	3	3	6
	D295	5-inch/54 HE CVT OR	7	7	14
	D338	5-inch/54 HE MT OR	7	7	14
ANGL.5.67	D353	5-inch/54 Illum OR	7	7	14
	D354	5-inch/54 Illum	7	7	14
ANGL.5.68	D339	5-inch/54 PD OR	10	10	20
	D339	5-inch/54 PD	6	6	12
	D295	5-inch/54 HE CVT OR	4	4	8
	D338	5-inch/54 HE MT OR	4	4	8
	D313	5-inch/54 WP PD OR	4	4	8
	D314	5-inch/54 WP MT	4	4	8
ANGL.5.69	D339	5-inch/54 PD OR	14	14	28
	D339	5-inch/54 PD	6	6	12
	D295	5-inch/54 HE CVT OR	8	8	16
	D338	5-inch/54 HE MT OR	8	8	16
	D313	5-inch/54 WP PD OR	8	8	16
	D314	5-inch/54 WP MT	8	8	16
ANGL.5.70	D339	5-inch/54 PD OR	14	14	28
	D339	5-inch/54 PD	6	6	12
	D295	5-inch/54 HE CVT OR	8	8	16
	D338	5-inch/54 HE MT OR	8	8	16
	D313	5-inch/54 WP PD OR	8	8	16
	D314	5-inch/54 WP MT	8	8	16
ANGL.5.71	D339	5-inch/54 PD	15	15	30

TRAINING MATERIALS

See the MCI catalog for those MCI courses that cover the appropriate OCCFLD 08 MOS's

See DA PAM 351-20, Army Correspondence Course Program for artillery courses available.

See local TAVSC's for artillery TEC lessons and the USAFAS ILC Catalog of Programs.

ACP-121, COMMUNICATIONS INSTRUCTIONS, GENERAL, W/US SUPP 1&2	ANGL.3.26	ANGL.3.29		
ACP-124, COMMUNICATIONS INSTRUCTIONS, GENERAL, W/US SUPP 1&2	ANGL.3.26	ANGL.3.29		
ACP-125(D), RADIO TELEPHONE OPERATOR PROCEDURES	ANGL.3.35			
ACP-125, COMMUNICATIONS INSTRUCTION FOR RADIO TELEPHONE PROCEDURES WITH US SUPP 1&2	ANGL.3.24	ANGL.3.26	ANGL.3.29	
ANGLICO COMMUNICATIONS HANDBOOK	ANGL.3.23	ANGL.3.25		
APPLICABLE NUMERICAL CIPHER/AUTHENTICATION SYSTEM	ANGL.3.30			
APPROPRIATE TM/OPERATORS MANUAL	ANGL.3.18			
AR 105-3, REPORTING MEACONING, INTRUSION, JAMMING, AND INTERFERENCE OF ELECTROMAGNETIC SYSTEMS	ANGL.3.34			
ATP-38, AMPHIBIOUS OPERATIONS	ANGL.3.31			
ATP-4(D), ALLIED SPOTTING PROCEDURES FOR NGF SUPPORT	ANGL.5.58 ANGL.5.62 ANGL.5.70	ANGL.5.59 ANGL.5.65 ANGL.5.71	ANGL.5.60 ANGL.5.68	ANGL.5.61 ANGL.5.69
ATP-4(E), ALLIED SPOTTING PROCEDURES FOR NGF SUPPORT	ANGL.5.64			
BCT JOB AIDS	ANGL.4.20 ANGL.4.24 ANGL.5.40 ANGL.5.44 ANGL.5.48 ANGL.5.52 ANGL.5.56	ANGL.4.21 ANGL.4.25 ANGL.5.41 ANGL.5.45 ANGL.5.49 ANGL.5.53 ANGL.5.57	ANGL.4.22 ANGL.5.38 ANGL.5.42 ANGL.5.46 ANGL.5.50 ANGL.5.54	ANGL.4.23 ANGL.5.39 ANGL.5.43 ANGL.5.47 ANGL.5.51 ANGL.5.55
CEOI, COMMUNICATIONS-ELECTRONIC OPERATING INSTRUCTIONS	ANGL.3.29	ANGL.3.34		
CONSURFWARDEVGRU TACMEMO PD 3410-1-97, SUPPRESSION OF ENEMY AIR DEFENSES (SEAD) FIRE MISSIONS USING NAVAL GUNFIRE SUPPORT	ANGL.5.61			
DCT JOB AIDS	ANGL.4.16 ANGL.5.27 ANGL.5.31 ANGL.5.35	ANGL.4.17 ANGL.5.28 ANGL.5.32 ANGL.5.36	ANGL.4.18 ANGL.5.29 ANGL.5.33 ANGL.5.37	ANGL.4.19 ANGL.5.30 ANGL.5.34
DEPIM 115840-367-12, OPERATOR'S MANUAL, AN/PPN-19	ANGL.3.33			
FM 100-2-3, THE SOVIET ARMY TROOPS, ORGANIZATION AND EQUIPMENT	ANGL.4.31			
FM 101-5-1, OPERATIONAL TERMS AND SYMBOLS	ANGL.4.26	ANGL.4.27	ANGL.5.72	
FM 21-26, MAP READING	ANGL.2.1 ANGL.2.5	ANGL.2.2 ANGL.2.6	ANGL.2.3 ANGL.4.1	ANGL.2.4 ANGL.5.7
FM 24-1, COMBAT COMMUNICATIONS	ANGL.3.29			
FM 24-18, FIELD RADIO PROCEDURES	ANGL.3.24 ANGL.3.26	ANGL.3.21 ANGL.3.29	ANGL.3.22 ANGL.3.35	ANGL.3.23

FM 24-21, TACTICAL MULTICHANNEL RADIO COMMUNICATIONS AND TECHNIQUES	ANGL.3.26	ANGL.3.29		
FM 24-33, COMMUNICATIONS TECHNIQUES FOR ELECTRONIC COUNTER-COUNTERMEASURES	ANGL.3.24	ANGL.3.34		
FM 31-11C-S, SPECIAL FORCES SOLDIER’S MANUAL	ANGL.2.28			
FM 6-121, TACTICS, TECHNIQUES, AND PROCEDURES FOR FIELD ARTILLERY TARGET ACQUISITION	ANGL.5.76 ANGL.5.80	ANGL.5.77	ANGL.5.78	ANGL.5.79
FM 6-20, FIRE SUPPORT IN THE AIRLAND BATTLE	ANGL.4.31			
FM 6-20-10, TARGETING PROCESS	ANGL.4.29			
FM 6-20-30, FIRE SUPPORT FOR CORPS AND DIVISION	ANGL.4.32			
FM 6-20-40, FIRE SUPPORT FOR BRIGADE OPERATIONS (HEAVY)	ANGL.4.28 ANGL.5.74	ANGL.4.29 ANGL.5.75	ANGL.4.31	ANGL.4.32
FM 6-20-50, FIRE SUPPORT FOR BRIGADE OPERATIONS (LIGHT)	ANGL.4.28 ANGL.5.74	ANGL.4.29 ANGL.5.75	ANGL.4.31	ANGL.4.32
FM 6-30, OBSERVED FIRE PROCEDURES	ANGL.2.9 ANGL.4.14 ANGL.4.8 ANGL.5.11 ANGL.5.15 ANGL.5.19 ANGL.5.23 ANGL.5.28 ANGL.5.58 ANGL.5.62 ANGL.5.9	ANGL.4.10 ANGL.4.15 ANGL.4.9 ANGL.5.12 ANGL.5.16 ANGL.5.20 ANGL.5.24 ANGL.5.29 ANGL.5.59 ANGL.5.63	ANGL.4.12 ANGL.4.31 ANGL.5.1 ANGL.5.13 ANGL.5.17 ANGL.5.21 ANGL.5.25 ANGL.5.30 ANGL.5.6 ANGL.5.7	ANGL.4.13 ANGL.4.7 ANGL.5.10 ANGL.5.14 ANGL.5.18 ANGL.5.22 ANGL.5.27 ANGL.5.4 ANGL.5.60 ANGL.5.8
FM 6-50, THE FIELD ARTILLERY CANNON BATTERY	ANGL.5.76	ANGL.5.77	ANGL.5.78	ANGL.5.79
FM 6-8, SUPPORTING ARMS OBSERVER, SPOTTER, AND CONTROLLER	ANGL.5.77	ANGL.5.78	ANGL.5.79	
FMFM 0-3, DOCTRINAL PUBLICATIONS GUIDE	ANGL.3.31			
FMFM 2-7, FIRE SUPPORT IN MAGTF OPERATIONS	ANGL.4.30	ANGL.4.32	ANGL.5.75	
FMFM 3-3, HELICOPTER OPERATIONS	ANGL.2.29			
FMFM 3-30, COMMUNICATIONS	ANGL.3.24	ANGL.3.9		
FMFM 4-6, AIR MOVEMENT OF FMF UNITS	ANGL.3.27			
FMFM 5-4, OFFENSIVE AIR SUPPORT	ANGL.5.25	ANGL.5.73		
FMFM 5-4A, CLOSE AIR SUPPORT AND CLOSE-IN FIRE SUPPORT	ANGL.5.25	ANGL.5.73		
FMFM 6-18, TECHNIQUES AND PROCEDURES FOR FIRE SUPPORT COORDINATION	ANGL.4.26 ANGL.4.30 ANGL.5.72 ANGL.5.80	ANGL.4.27 ANGL.4.31 ANGL.5.73	ANGL.4.28 ANGL.4.32 ANGL.5.74	ANGL.4.29 ANGL.5.26 ANGL.5.75
FMFM 6-4, MARINE RIFLE COMPANY/PLATOON	ANGL.2.16	ANGL.2.22		
FMFM 6-5, MARINE RIFLE SQUAD	ANGL.2.10 ANGL.2.14 ANGL.2.18 ANGL.2.22	ANGL.2.11 ANGL.2.15 ANGL.2.19	ANGL.2.12 ANGL.2.16 ANGL.2.20	ANGL.2.13 ANGL.2.17 ANGL.2.21
FMFM 6-7, SCOUTING AND PATROLLING FOR INFANTRY UNITS	ANGL.2.10 ANGL.2.14 ANGL.2.18 ANGL.2.22	ANGL.2.11 ANGL.2.15 ANGL.2.19	ANGL.2.12 ANGL.2.16 ANGL.2.20	ANGL.2.13 ANGL.2.17 ANGL.2.21

FMFM 6-8, SUPPORTING ARMS OBSERVER, SPOTTER, AND CONTROLLER	ANGL.2.9	ANGL.4.10	ANGL.4.11	ANGL.4.12
	ANGL.4.13	ANGL.4.14	ANGL.4.15	ANGL.4.2
	ANGL.4.3	ANGL.4.4	ANGL.4.5	ANGL.4.7
	ANGL.4.8	ANGL.4.9	ANGL.5.1	ANGL.5.10
	ANGL.5.11	ANGL.5.12	ANGL.5.13	ANGL.5.14
	ANGL.5.16	ANGL.5.17	ANGL.5.18	ANGL.5.19
	ANGL.5.20	ANGL.5.22	ANGL.5.23	ANGL.5.24
	ANGL.5.25	ANGL.5.26	ANGL.5.27	ANGL.5.28
	ANGL.5.29	ANGL.5.30	ANGL.5.58	ANGL.5.59
	ANGL.5.60	ANGL.5.61	ANGL.5.62	ANGL.5.63
	ANGL.5.65	ANGL.5.66	ANGL.5.67	ANGL.5.68
	ANGL.5.69	ANGL.5.70	ANGL.5.71	ANGL.5.76
	ANGL.5.9			
FMFM 6-9, MARINE ARTILLERY SUPPORT	ANGL.5.76	ANGL.5.77	ANGL.5.78	ANGL.5.79
FMFM 7-41/FM 57-220, BASIC PARACHUTING TECHNIQUES AND AND TRAINING	ANGL.1.12	ANGL.1.13	ANGL.1.14	ANGL.1.16
	ANGL.1.17	ANGL.1.18	ANGL.1.19	ANGL.1.20
	ANGL.1.21	ANGL.1.22	ANGL.1.23	ANGL.1.24
	ANGL.1.25	ANGL.1.26	ANGL.1.27	ANGL.1.5
	ANGL.1.6	ANGL.1.9		
FMFM 7-42/FM 57-230, ADVANCED PARACHUTING TECHNIQUES AND TRAINING	ANGL.1.1	ANGL.1.10	ANGL.1.11	ANGL.1.15
	ANGL.1.2	ANGL.1.3	ANGL.1.4	ANGL.1.6
	ANGL.1.7	ANGL.1.8		
FMFRP 3-34, ANTENNA CONSTRUCTION	ANGL.3.21	ANGL.3.23		
GPS RECEIVER OPERATION AND MAINTENANCE GUIDE	ANGL.2.7	ANGL.2.8		
GTA 6-7-3, OF FAN	ANGL.4.9			
JOINT PUBLICATION 6-05.4	ANGL.3.9			
LOCAL SOTG SOP FOR FAST ROPE (USE UNTIL FORMAL MARINE CORPS REFERENCES ARE PUBLISHED)	ANGL.2.26			
LOCAL SOTG SOP FOR ROPE MANAGEMENT (USE UNTIL FORMAL MARINE CORPS REFERENCES ARE PUBLISHED)	ANGL.2.24	ANGL.2.25		
MCBUL 3000 SERIES, MARES LOGISTICS REPORTABLE EQUIPMENT 94	ANGL.3.1	ANGL.3.10	ANGL.3.11	ANGL.3.12
	ANGL.3.13	ANGL.3.14	ANGL.3.15	ANGL.3.16
	ANGL.3.17	ANGL.3.18	ANGL.3.2	ANGL.3.20
	ANGL.3.21	ANGL.3.3	ANGL.3.4	ANGL.3.5
	ANGL.3.6	ANGL.3.7	ANGL.3.8	
MCFSS VERSION 9.57 SOP	ANGL.4.16	ANGL.4.17	ANGL.4.18	ANGL.4.19
	ANGL.4.20	ANGL.4.21	ANGL.4.22	ANGL.4.23
	ANGL.4.24	ANGL.4.25	ANGL.5.27	ANGL.5.28
	ANGL.5.29	ANGL.5.30	ANGL.5.31	ANGL.5.32
	ANGL.5.33	ANGL.5.34	ANGL.5.35	ANGL.5.36
	ANGL.5.37	ANGL.5.38	ANGL.5.39	ANGL.5.40
	ANGL.5.41	ANGL.5.42	ANGL.5.43	ANGL.5.44
	ANGL.5.45	ANGL.5.46	ANGL.5.47	ANGL.5.48
	ANGL.5.49	ANGL.5.50	ANGL.5.51	ANGL.5.52
	ANGL.5.53	ANGL.5.54	ANGL.5.55	ANGL.5.56
	ANGL.5.57			
MCI 03.32F, RECONNAISSANCE MARINE	ANGL.2.27	ANGL.2.29	ANGL.2.30	ANGL.2.31
	ANGL.2.9			
MCO 3501.6B, MARINE CORPS COMBAT READINESS EVALUATION SYSTEM (SHORT TITLE: MCCRES); VOLUME V, ARTILLERY UNITS	ANGL.4.11	ANGL.4.12	ANGL.4.13	ANGL.4.14
	ANGL.5.1	ANGL.5.10	ANGL.5.11	ANGL.5.12
	ANGL.5.13	ANGL.5.14	ANGL.5.16	ANGL.5.18
	ANGL.5.19	ANGL.5.58	ANGL.5.59	ANGL.5.9
	ANGL.2.2	ANGL.5.27	ANGL.5.28	ANGL.5.29
	ANGL.5.30			

MCO 1510.110
7 Apr 97

MCO P3000.11, MARES INTRO POLICY MANUAL	ANGL.3.1	ANGL.3.10	ANGL.3.11	ANGL.3.12
	ANGL.3.13	ANGL.3.14	ANGL.3.15	ANGL.3.16
	ANGL.3.17	ANGL.3.18	ANGL.3.2	ANGL.3.20
	ANGL.3.21	ANGL.3.3	ANGL.3.4	ANGL.3.5
	ANGL.3.6	ANGL.3.7	ANGL.3.8	
MCO P4600.7C, USMC TRANSPORTATION MANUAL	ANGL.3.27			
MCO P4790.2, MIMMS FIELD PROCEDURES MANUAL	ANGL.3.1	ANGL.3.10	ANGL.3.11	ANGL.3.12
	ANGL.3.13	ANGL.3.14	ANGL.3.15	ANGL.3.16
	ANGL.3.17	ANGL.3.18	ANGL.3.2	ANGL.3.20
	ANGL.3.21	ANGL.3.3	AGL.3.4	ANGL.3.5
	ANGL.3.6	ANGL.3.7	ANGL.3.8	ANGL.5.3
	ANGL.5.5			
NAVAIR 1345-2, SPIE MANUAL	ANGL.2.25			
NAVAL GUNFIRE SPOTTER'S MANUAL, LITTLE CREEK, VA, DTD 9/89	ANGL.5.63	ANGL.5.64	ANGL.5.66	
NTP-2, SECTION 1(B), DEFENSE SATELLITE COMMUNICATIONS SYSTEM	ANGL.3.9			
NWP 22-2/FMFM 1-7, SUPPORTING ARMS IN AMPHIBIOUS OPERATIONS	ANGL.3.33			
OH 7-12, ENEMY ELECTRONIC WARFARE	ANGL.3.24			
OPERATORS MANUAL, GROUND COMMANDER'S POINTER NEVC MODEL GCP-1, OCT 92	ANGL.5.2			
OPERATORS MANUAL, LONG RANGE LASER LPI-30, POINTER VERSION 11.92, PART NUMBER 863900100	ANGL.5.2			
ST 21-75-3, DISMOUNTED PATROLLING	ANGL.2.23			
ST 6-50-20, BATTERY EXECUTIVE OFFICER'S/PLATOON LEADER'S HANDBOOK: CANNON ARTILLERY	ANGL.5.76	ANGL.5.77	ANGL.5.78	ANGL.5.79
STP 7-11B1-SM, SOLDIER'S MANUAL, INFANTRYMAN SL 1	ANGL.3.32			
SW-300-BD-ORD-010, VOL 1, NAVSEA TECHNICAL MANUAL PREPARATION, ANALYSIS AND PREDICTED ACCURACY FOR NAVAL GUNNERY	ANGL.5.63			
TM 07508A-14, INSTRUCTION MANUAL, AS-2259/GR HF TACTICAL ANTENNA	ANGL.3.20			
TM 07748A-12/1, OPERATOR'S MANUAL, AN/PRC-104	ANGL.3.3			
TM 07749A/07743A-12/1, OPERATOR'S MANUAL, AN/MRC-138	ANGL.3.4			
TM 08579A-12/1, OPERATOR AND ORGANIZATIONAL MAINTENANCE INSTRUCTION FOR MANUAL	ANGL.4.2 ANGL.4.8	ANGL.4.3 ANGL.5.7	ANGL.4.4	ANGL.4.5
TM 08848A-14/1, OPERATOR'S MANUAL, MX-9331B/URC	ANGL.3.11			
TM 09726A-13, OPERATOR'S MANUAL, KY-99	ANGL.3.16			
TM 11-5805-201-12, OPERATIONAL MANUAL, TA-312/PT	ANGL.3.22			
TM 11-5810-256-12, OPERATING PROCEDURES FOR COMMUNICATIONS SECURITY EQUIPMENT	ANGL.3.12			
TM 11-5810-256-OP-7, OPERATING PROCEDURES FOR COMMUNICATIONS SECURITY EQUIPMENT	ANGL.3.14	ANGL.3.15	ANGL.3.16	ANGL.3.28
TM 11-5810-280-12 & P, OPERATOR'S MANUAL, TSEC/KY-65	ANGL.3.13			
TM 11-5810-292-12, COMMUNICATIONS SECURITY, KYK-13, KYK-15, KOI-18	ANGL.3.12			

Appendix D to
ENCLOSURE (5)

TM 11-5810-292-13, COMMUNICATIONS SECURITY EQUIPMENT KYK-13, KYK-15, KOI-18	ANGL.3.14	ANGL.3.28		
TM 11-5810-292-34P, COMMUNICATIONS SECURITY EQUIPMENT	ANGL.3.28			
TM 11-5820-203-12&P, OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL FOR LASER MARKER, AN/PEQ-1 (SOFLAM)	ANGL.4.6			
TM 11-5820-401-10-2, OPERATOR'S MANUAL, AN/MRC-110	ANGL.3.11	ANGL.3.5		
TM 11-5820-477-12, OPERATOR'S MANUAL, AN/GRA-39	ANGL.3.2			
TM 11-5820-498-12, OPERATOR'S MANUAL, AN/PRC-77	ANGL.3.1			
TM 11-5820-667-12, OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL: RADIO SET, AN/PRC-77 (INCLUDING RECEIVER-TRANSMITTER, RADIO RT-841/PRC-77)	ANGL.3.23			
TM 11-5820-890-10-1, OPERATOR MANUAL, AN/MRC-145	ANGL.3.6			
TM 11-5820-890-10-2, SINCGARS OPERATOR'S MANUAL	ANGL.3.10			
TM 11-5860-201-10, OPERATOR'S MANUAL: LASER INFRARED OBSERVATION SET, AN/GVS-5	ANGL.4.1	ANGL.5.3	ANGL.5.4	
TM 11-5860-203-12&P, OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL FOR LASER MARKER, AN/PEQ-1 (SOFLAM)	ANGL.5.4	ANGL.5.5	ANGL.5.6	
TM 11-5895-1130-10/1, OPERATORS MANUAL, AN/PSC-3 SATELLITE COMMUNICATIONS TERMINAL	ANGL.3.9			
TM 11-5895-1325-12, DCT OPERATIONS MANUAL	ANGL.4.16 ANGL.5.27 ANGL.5.31 ANGL.5.35	ANGL.4.17 ANGL.5.28 ANGL.5.32 ANGL.5.36	ANGL.4.18 ANGL.5.29 ANGL.5.33 ANGL.5.37	ANGL.4.19 ANGL.5.30 ANGL.5.34
TM 11-5985-357-13, OPERATOR'S MANUAL, OE-254	ANGL.3.19			
TM 11-7025-279-10-1, OPERATOR PROCEDURE GUIDE (LTACFIRE)	ANGL.4.20 ANGL.4.24 ANGL.5.40 ANGL.5.44 ANGL.5.48 ANGL.5.52 ANGL.5.56	ANGL.4.21 ANGL.4.25 ANGL.5.41 ANGL.5.45 ANGL.5.49 ANGL.5.53 ANGL.5.57	ANGL.4.22 ANGL.5.38 ANGL.5.42 ANGL.5.46 ANGL.5.50 ANGL.5.54	ANGL.4.23 ANGL.5.39 ANGL.5.43 ANGL.5.47 ANGL.5.51 ANGL.5.55
TM 31R2-2PRC113-1-1, SUPPLEMENTAL OPERATOR'S MANUAL RADIO SET, AN/PRC-113(V)2	ANGL.3.7			
TM 4700-15/1, EQUIPMENT RECORD PROCEDURES	ANGL.3.1 ANGL.3.13 ANGL.3.18 ANGL.3.3 ANGL.3.7	ANGL.3.10 ANGL.3.15 ANGL.3.2 ANGL.3.4 ANGL.3.8	ANGL.3.11 ANGL.3.16 ANGL.3.20 ANGL.3.5	ANGL.3.12 ANGL.3.17 ANGL.3.21 ANGL.3.6
TM 5820-498-12, SINCGARS OPERATOR MAINTENANCE MANUAL	ANGL.3.10			

INDIVIDUAL TRAINING STANDARDS FOR FIRE SUPPORT, ANGLICO

MOS ANGL, FIRE SUPPORT HAN

DUTY AREA 1 - PARACHUTING

TASK ANGL.1.1	6-A-1
PERFORM PREJUMP TRAINING	
TASK ANGL.1.2	6-A-1
EXECUTE PREJUMP TRAINING FOR THE INTENTIONAL WATER JUMP	
TASK ANGL.1.3	6-A-2
PREPARE INDIVIDUAL COMBAT EQUIPMENT FOR PARACHUTE OPERATIONS	
TASK ANGL.1.4	6-A-2
DON PARACHUTE, RESERVE, AND COMBAT EQUIPMENT FOR PARACHUTE OPERATIONS	
TASK ANGL.1.5	6-A-3
EXECUTE JUMP COMMANDS FOR FIXED WING AIRCRAFT	
TASK ANGL.1.6	6-A-3
EXECUTE JUMP COMMANDS FOR CH-53 AND CH-46	
TASK ANGL.1.7	6-A-4
EXECUTE JUMP COMMANDS FOR UH-1/UH-60	
TASK ANGL.1.8	6-A-5
DEMONSTRATE THE USE OF A STATIC LINE EXTENSION	
TASK ANGL.1.9	6-A-5
EXECUTE EXIT PROCEDURES FOR FIXED WING AIRCRAFT	
TASK ANGL.1.10	6-A-5
EXECUTE EXIT PROCEDURES FOR CH-53 AND CH-46	
TASK ANGL.1.11	6-A-6
EXECUTE EXIT PROCEDURES FOR UH-1/UH-60 AIRCRAFT	
TASK ANGL.1.12	6-A-6
EXECUTE THE FIVE POINTS OF PERFORMANCE	
TASK ANGL.1.13	6-A-7
MANEUVER THE MC1-1B/T-10 PARACHUTE	
TASK ANGL.1.14	6-A-7
PERFORM PARACHUTE LANDING FALL	
TASK ANGL.1.15	6-A-8
REACT TO ACCIDENTAL ACTIVATION OF RESERVE PARACHUTE INSIDE THE AIRCRAFT	
TASK ANGL.1.16	6-A-8
REACT TO TOTAL PARACHUTE MALFUNCTION AND A DELAYED OPENING	
TASK ANGL.1.17	6-A-9
REACT TO PARTIAL PARACHUTE MALFUNCTION	
TASK ANGL.1.18	6-A-9
REACT TO TWISTED RISERS AND SUSPENSION LINES	
TASK ANGL.1.19	6-A-10
REACT TO AVOID A COLLISION OR ENTANGLEMENT BETWEEN JUMPERS	
TASK ANGL.1.20	6-A-10
PERFORM EMERGENCY PROCEDURES FOR ENTANGLEMENT WITH MC1-1B/T-10 PARACHUTE	
TASK ANGL.1.21	6-A-11
PERFORM EMERGENCY PROCEDURES FOR A TREE LANDING	
TASK ANGL.1.22	6-A-11
PERFORM EMERGENCY PROCEDURES FOR A WATER LANDING	
TASK ANGL.1.23	6-A-12
PERFORM EMERGENCY PROCEDURES FOR A WIRE LANDING	
TASK ANGL.1.24	6-A-13
EXECUTE TOWED JUMPER PROCEDURE	
TASK ANGL.1.25	6-A-13
RECOVER FROM PARACHUTE DRAG DURING HIGH WIND CONDITIONS	
TASK ANGL.1.26	6-A-14
IDENTIFY THE BUDDY-ASSIST METHOD OF RECOVERY	
TASK ANGL.1.27	6-A-14
EXECUTE RECOVERY OF AIRBORNE EQUIPMENT ON DROP ZONES	

DUTY AREA 2 - BASIC TACTICAL SKILLS

TASK ANGL.2.1	6-A-15
ORIENT A MAP USING A LENSATIC COMPASS	
TASK ANGL.2.2	6-A-15
LOCATE YOUR POSITION DURING A TERRAIN WALK	
TASK ANGL.2.3	6-A-15
NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED	

TASK ANGL.2.4.	6-A-16
LOCATE POSITIONS IN A MOBILE ENVIRONMENT	
TASK ANGL.2.5.	6-A-16
LOCATE POSITION ON A MAP OR GRWND BY RESECTION	
TASK ANGL.2.6	.6-A-17
DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP	
TASK ANGL.2.7.	6-A-18
LOCATE YOUR POSITION USING A PORTABLE LIGHTWEIGHT GLOBAL POSITIONING SYSTEM (GPS)	
TASK ANGL.2.8	.6-A-18
NAVIGATE FROM ONE POINT ON THE GRWND TO ANOTHER USING A PORTABLE LIGHTWEIGHT GLOBAL POSITIONING SYSTEM	
TASK ANGL.2.9.	6-A-19
PREPARE A PANORAMIC TERRAIN SKETCH	
TASK ANGL.2.10	6-A-20
PREPARE AND ISSUE A PATROL WARNING ORDER	
TASK ANGL.2.11	6-A-21
PREPARE AND ISSUE A PATROL ORDER AND ORDER ANNEXES	
TASK ANGL.2.12	6-A-22
PREPARE PATROL ROUTES AND OVERLAYS	
TASK ANGL.2.13	6-A-23
CONDUCT PATROL REHEARSALS	
TASK ANGL.2.14	6-A-23
CONDUCT PATROL INSPECTIONS	
TASK ANGL.2.15	6-A-24
ENTER AND EXIT FRIENDLY LINES VIA FOOT MOVEMENT	
TASK ANGL.2.16	6-A-25
CONTROL PATROL MOVEMENT	
TASK ANGL.2.17	6-A-26
CROSS DANGER AREAS	
TASK ANGL.2.18	6-A-27
EXECUTE IMMEDIATE ACTION DRILLS	
TASK ANGL.2.19	6-A-28
DIRECT IMMEDIATE ACTION DRILLS	
TASK ANGL.2.20	6-A-29
PERFORM SURVEILLANCE/OBSERVATION TECHNIQUES	
TASK ANGL.2.21	6-A-30
DIRECT ACTIONS AT THE OBJECTIVE AREA	
TASK ANGL.2.22	6-A-31
ESTABLISH A PATROL BASE	
TASK ANGL.2.23	6-A-32
CONDUCT AN INSERT/EXTRACT VIA HELICOPTER LANDING	
TASK ANGL.2.24	6-A-32
RAPPEL INSERT VIA HELICOPTER	
TASK ANGL.2.25.	.6-A-33
CONDUCT INSERTION/EXTRACTION VIA A SPECIAL PATROL INSERTION/ EXTRACTION (SPIE) OPERATION	
TASK ANGL.2.26	6-A-34
CONDUCT INDIVIDUAL ROPE MANAGEMENT	
TASK ANGL.2.27	6-A-34
DIRECT A HELICOPTER LANDING/TAKEOFF	
TASK ANGL.2.28	6-A-35
STERILIZE LANDING ZONE	
TASK ANGL.2.29.	.6-A-36
GIVE A LANDING ZONE BRIEF	
TASK ANGL.2.30	6-A-36
SELECT LANDING ZONE FOR ROTARY WING AIRCRAFT	
TASK ANGL.2.31	6-A-36
ESTABLISH A LANDING ZONE (DAY/NIGHT)	
 <u>DUTY AREA 3 - COMMUNICATIONS</u>	
TASK ANGL.3.1.	6-A-38
OPERATE THE AN/PRC-77 RADIO SET	
TASK ANGL.3.2.	6-A-39
OPERATE AN/GRA-39 RADIO SET CONTROL GROUP	
TASK ANGL.3.3	.6-A-39
OPERATE AN/PRC-104 RADIO SET	
TASK ANGL.3.4	.6-A-40
OPERATE AN/MRC-138 RADIO SET	
TASK ANGL.3.5	.6-A-41
OPERATE AN/MRC-110A RADIO SET	

TASK ANGL.3.6 . . . . .	.6-A-43
OPERATE AN/MRC-145 RADIO SET	
TASK ANGL.3.7 . . . . .	.6-A-44
OPERATE AN/PRC-113 RADIO SET	
TASK ANGL.3.8 . . . . .	.6-A-45
OPERATE AN/VRC-83 RADIO SET	
TASK ANGL.3.9 . . . . .	.6-A-46
OPERATE AN/PSC-3 MANPACK SATELLITE TERMINAL	
TASK ANGL.3.10	6-A-47
OPERATE AN/PRC-119A SINCGARS RADIO	
TASK ANGL.3.11	6-A-48
OPERATE MX-9331B/URC REGENERATIVE REPEATER	
TASK ANGL.3.12	6-A-49
OPERATE TSEC/KY-57 COMMUNICATION SECURITY EQUIPMENT	
TASK ANGL.3.13	6-A-50
OPERATE TSEC/KY-65 COMMUNICATION SECURITY SYSTEM, PARKHILL	
TASK ANGL.3.14	6-A-51
OPERATE TSEC/KYK-13 COMMUNICATIONS SECURITY EQUIPMENT	
TASK ANGL.3.15	6-A-51
OPERATE TSEC/KOI-18 COMMUNICATIONS SECURITY EQUIPMENT	
TASK ANGL.3.16	6-A-52
OPERATE TSEC/KYK-99 COMMUNICATIONS SECURITY EQUIPMENT	
TASK ANGL.3.17	6-A-53
OPERATE KL-43C COMMUNICATIONS SECURITY EQUIPMENT	
TASK ANGL.3.18	6-A-54
COMMUNICATE UTILIZING A TACTICAL ANTENNA (RC-292/OE-254)	
TASK ANGL.3.19	6-A-55
ERECT OE-254	
TASK ANGL.3.20	6-A-56
OPERATE AS-2259/GR HF TACTICAL ANTENNA	
TASK ANGL.3.21	6-A-57
CONSTRUCT LONG WIRE ANTENNA	
TASK ANGL.3.22	6-A-58
CAMOUFLAGE COMMUNICATIONS EQUIPMENT	
TASK ANGL.3.23	6-A-58
UTILIZE FIELD EXPEDIENT ANTENNA FOR HF AND VHF COMMUNICATIONS EQUIPMENT	
TASK ANGL.3.24	6-A-60
DIRECT REMEDIAL ELECTRONIC COUNTER-COUNTERMEASURES (ECCM) PROCEDURES	
TASK ANGL.3.25	6-A-60
PERFORM TROUBLESHOOTING PROCEDURES ON A FAULTY RADIO	
TASK ANGL.3.26	6-A-61
MAINTAIN CIRCUIT LOGS	
TASK ANGL.3.27	6-A-61
PREPARE COMMUNICATIONS ASSETS FOR EMBARKATION	
TASK ANGL.3.28	6-A-62
OPERATE TSEC/KYK-15 COMMUNICATIONS SECURITY EQUIPMENT	
TASK ANGL.3.29	6-A-62
UTILIZE CORRECT PROCEDURES TO ESTABLISH, ENTER, AND LEAVE A RADIO TELEPHONE NET	
TASK ANGL.3.30	6-A-63
UTILIZE NUMERICAL CIPHER AUTHENTICATION SYSTEM TO ENCODE, DECODE, AND AUTHENTICATE	
TASK ANGL.3.31 . . . . .	.6-A-64
SEND MESSAGE USING NATO FORMAT	
TASK ANGL.3.32	6-A-65
OPERATE TA-312 AND TA-1 FIELD TELEPHONES	
TASK ANGL.3.33	6-A-66
OPERATE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)	
TASK ANGL.3.34	6-A-66
INITIATE OPERATOR'S MEACONING, INTRUSION, JAMMING, AND INTERFERENCE REPORTS (MIJI 1 AND 2)	
TASK ANGL.3.35	6-A-67
COMMUNICATE USING PROPER RADIO TELEPHONE PROCEDURES	

DUTY AREA 4 - PREPARE FOR FIRE SUPPORT OPERATIONS

TASK ANGL.4.1 . . . . .	.6-A-68
DETERMINE LOCATION WITH THE AN/GVS-5 LASER RANGE FINDER	
TASK ANGL.4.2 . . . . .	.6-A-68
DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO KNOWN POINTS	
TASK ANGL.4.3 . . . . .	.6-A-69
DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST	

TASK ANGL.4.4 . . . . .	.6-A-69
DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS	
TASK ANGL.4.5 . . . . .	.6-A-70
DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING SELF-LOCATION PROCEDURE	
TASK ANGL.4.6 . . . . .	.6-A-70
DETERMINE LOCATION WITH THE SPECIAL OPERATION FORCES LASER MARKER (SOFLAM)	
TASK ANGL.4.7 . . . . .	.6-A-71
SELECT AN OBSERVATION POST AND PREPARE TO USE IT	
TASK ANGL.4.8 . . . . .	.6-A-72
PREPARE AN OBSERVATION POST FOR USE WHILE MULE EQUIPPED	
TASK ANGL.4.9 . . . . .	.6-A-72
PLACE THE OBSERVED FIRE (OF) FAN ON A MAP	
TASK ANGL.4.10	6-A-73
DETERMINE DIRECTION TO TWO TARGETS	
TASK ANGL.4.11	6-A-73
PREPARE A VISIBILITY DIAGRAM	
TASK ANGL.4.12	6-A-74
LOCATE A TARGET BY GRID COORDINATES	
TASK ANGL.4.13	6-A-74
LOCATE A TARGET BY POLAR PLOT	
TASK ANGL.4.14	6-A-75
LOCATE A TARGET BY SHIFT FROM A KNOWN POINT	
TASK ANGL.4.15	6-A-75
MEASURE ANGULAR DEVIATION WITH YOUR HAND	
TASK ANGL.4.16	6-A-76
PREPARE THE DIGITAL COMMUNICATION TERMINAL (DCT) FOR OPERATION	
TASK ANGL.4.17	6-A-76
ESTABLISH COMMUNICATIONS PARAMETERS WITH THE DCT	
TASK ANGL.4.18	6-A-77
REPORT OBSERVER LOCATION WITH THE DCT	
TASK ANGL.4.19	6-A-77
DETERMINE OBSERVER LOCATION WITH THE DCT	
TASK ANGL.4.20	6-A-78
PREPARE THE BATTLEFIELD COMPUTER TERMINAL (BCT)/LIGHTWEIGHT COMPUTER UNIT (LCU) SINGLE TERMINAL COMMAND POST (STCP) FOR OPERATIONS	
TASK ANGL.4.21	6-A-78
PREPARE BCT/LCU DUAL TERMINAL COMMAND POST (DTCP) FOR OPERATIONS	
TASK ANGL.4.22	6-A-79
ESTABLISH COMMUNICATION PARAMETERS WITH THE BCT/LCU	
TASK ANGL.4.23	6-A-80
VERIFY BCT/LCU SETUP CONFIGURATIONS	
TASK ANGL.4.24	6-A-80
VERIFY INITIALIZATION DATA WITH THE BCT/LCU	
TASK ANGL.4.25	6-A-81
VERIFY THE INPUT OF THE COMMUNICATION RELATED MESSAGES WITH THE BCT/LCU	
TASK ANGL.4.26	6-A-81
POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)	
TASK ANGL.4.27	6-A-82
PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FSCC	
TASK ANGL.4.28	6-A-82
SUBMIT A LIST OF TARGETS	
TASK ANGL.4.29	6-A-83
CONSOLIDATE/PROCESS FORWARD OBSERVER'S LISTS OF TARGETS	
TASK ANGL.4.30	6-A-83
PREPARE A TARGET BULLETIN (TARBUL)	
TASK ANGL.4.31	6-A-84
ADVISE THE SUPPORTED UNIT OF FRIENDLY AND ENEMY FIRE SUPPORT CAPABILITIES AND LIMITATIONS	
TASK ANGL.4.32	6-A-84
ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)	
 <u>DUTY AREA 5 - CONDUCT FIRE SUPPORT OPERATIONS</u>	
TASK ANGL.5.1 . . . . .	.6-A-85
REQUEST AND ADJUST AREA FIRE	
TASK ANGL.5.2 . . . . .	.6-A-86
OPERATE THE GCP-1 (GROUND COMMANDER'S POINTER), OR INFRARED (JR) LASER LONG RANGE POINTER (LPI-30)	

TASK ANGL.5.3 . . . . .	.6-A-87
OPERATE THE AN/GVS-5 LASER RANGE FINDER	
TASK ANGL.5.4 . . . . .	.6-A-88
CONDUCT A FIRE MISSION WITH THE AN/GVS-5 LASER RANGE FINDER	
TASK ANGL.5.5 . . . . .	.6-A-88
OPERATE THE SPECIAL OPERATIONS FORCES LASER MARKER (SOFLAM)	
TASK ANGL.5.6 . . . . .	.6-A-90
CONDUCT A FIRE MISSION USING THE SPECIAL OPERATIONS FORCES LASER MARKER (SOFLAM)	
TASK ANGL.5.7 . . . . .	.6-A-90
CONDUCT A FIRE MISSION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)	
TASK ANGL.5.8 . . . . .	.6-A-92
CONDUCT A REGISTRATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)	
TASK ANGL.5.9 . . . . .	.6-A-92
CONDUCT A SUPPRESSION MISSION ON A PLANNED TARGET	
TASK ANGL.5.10 . . . . .	.6-A-92
CONDUCT AN IMMEDIATE SUPPRESSION MISSION	
TASK ANGL.5.11 . . . . .	.6-A-93
CONDUCT A FIRE FOR EFFECT MISSION	
TASK ANGL.5.12 . . . . .	.6-A-94
CONDUCT AN ILLUMINATION MISSION	
TASK ANGL.5.13 . . . . .	.6-A-94
CONDUCT A COORDINATED ILLUMINATION MISSION	
TASK ANGL.5.14 . . . . .	.6-A-95
CONDUCT A MISSION USING CREEPING FIRE PROCEDURES	
TASK ANGL.5.15 . . . . .	.6-A-95
CONDUCT A DANGER CLOSE FIRE MISSION	
TASK ANGL.5.16 . . . . .	.6-A-96
CONDUCT TWO FIRE MISSIONS SIMULTANEOUSLY	
TASK ANGL.5.17 . . . . .	.6-A-96
ADJUST FINAL PROTECTIVE FIRES	
TASK ANGL.5.18 . . . . .	.6-A-97
CONDUCT AN IMMEDIATE SMOKE MISSION	
TASK ANGL.5.19 . . . . .	.6-A-98
CONDUCT A QUICK SMOKE MISSION	
TASK ANGL.5.20 . . . . .	.6-A-99
CONDUCT A DESTRUCTION MISSION	
TASK ANGL.5.21 . . . . .	.6-A-99
CONDUCT A MISSION ON A MOVING TARGET	
TASK ANGL.5.22 . . . . .	.6-A-100
SELECT AND LOCATE REGISTRATION POINTS	
TASK ANGL.5.23 . . . . .	.6-A-100
CONDUCT EMERGENCY OBSERVER PROCEDURES	
TASK ANGL.5.24 . . . . .	.6-A-101
REQUEST FIRE ON IRREGULARLY SHAPED TARGETS	
TASK ANGL.5.25 . . . . .	.6-A-102
DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE	
TASK ANGL.5.26 . . . . .	.6-A-102
CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION USING ARTILLERY	
TASK ANGL.5.27 . . . . .	.6-A-103
PROCESS AN AREA FIRE MISSION WITH THE DIGITAL COMPUTER TERMINAL (DCT)	
TASK ANGL.5.28 . . . . .	.6-A-104
PROCESS SPECIAL FIRE MISSIONS WITH THE DCT	
TASK ANGL.5.29 . . . . .	.6-A-104
CONDUCT A PRECISION REGISTRATION WITH THE DCT	
TASK ANGL.5.30 . . . . .	.6-A-105
CONDUCT A HIGH BURST (HB) OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH THE DCT	
TASK ANGL.5.31 . . . . .	.6-A-106
REPORT ENEMY ACTIVITY BY USE OF THE AUTOMATED TERMINAL INDEX (ATI) MESSAGES WITH THE DCT	
TASK ANGL.5.32 . . . . .	.6-A-106
TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE DCT	
TASK ANGL.5.33 . . . . .	.6-A-107
REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE DCT	
TASK ANGL.5.34 . . . . .	.6-A-107
INPUT A TARGET IN THE KNOWN TARGET FILE WITH THE DCT	
TASK ANGL.5.35 . . . . .	.6-A-107
VERIFY DCT INITIALIZATION	
TASK ANGL.5.36 . . . . .	.6-A-108
VERIFY DCT INPUT MESSAGES	
TASK ANGL.5.37 . . . . .	.6-A-108
SUPERVISE PROCESSING OF A FIRE REQUEST FROM A DCT EQUIPPED	
BATTALION FSCC	

TASK ANGL.5.38 . . . . .	.6-A-109
INPUT DATA INTO THE SUPPORT PROGRAM OF THE BCT/LCU	
TASK ANGL.5.39 . . . . .	.6-A-109
INPUT DATA INTO THE AMMUNITION AND FIRE UNIT INFORMATION FILE OF THE BCT/LCU	
TASK ANGL.5.40 . . . . .	.6-A-110
VERIFY ENTRIES MADE INTO THE SUPPORT PROGRAM OF THE BCT/LCU	
TASK ANGL.5.41 . . . . .	.6-A-111
VERIFY THE INPUT OF AMMUNITION AND FIRE UNIT INFORMATION IN THE BCT/LCU	
TASK ANGL.5.42 . . . . .	.6-A-111
INPUT COMMANDERS CRITERIA INFORMATION IN THE BCT/LCU	
TASK ANGL.5.43 . . . . .	.6-A-112
PROCESS A FIRE MISSION REQUEST WITH THE BCT/LCU	
TASK ANGL.5.44 . . . . .	.6-A-112
PROCESS A SPECIAL FIRE MISSION REQUEST WITH THE BCT/LCU	
TASK ANGL.5.45 . . . . .	.6-A-113
VERIFY THE INPUT OF COMMANDER'S CRITERIA INFORMATION IN THE BCT/LCU	
TASK ANGL.5.46 . . . . .	.6-A-114
SUPERVISE THE PROCESSING OF A FIRE MISSION REQUEST WITH THE BCT/LCU	
TASK ANGL.5.47 . . . . .	.6-A-114
SUPERVISE THE PROCESSING OF SPECIAL FIRE MISSION REQUESTS WITH THE BCT/LCU	
TASK ANGL.5.48 . . . . .	.6-A-116
PROCESS TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE BCT/LCU	
TASK ANGL.5.49 . . . . .	.6-A-116
MODIFY THE ATI MODE 3 MODIFICATION FILE OF THE BCT/LCU	
TASK ANGL.5.50 . . . . .	.6-A-117
SUPERVISE PROCESSING OF TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE BCT/LCU	
TASK ANGL.5.51 . . . . .	.6-A-118
VERIFY THE MODIFICATION OF ATI MODE 3 RELATED MESSAGES WITH THE BCT/LCU	
TASK ANGL.5.52 . . . . .	.6-A-119
COMPUTE A NON-NUCLEAR FIRE PLAN WITH THE BCT/LCU	
TASK ANGL.5.53 . . . . .	.6-A-119
COMPUTE A FASCAM FIRE PLAN WITH THE BCT/LCU	
TASK ANGL.5.54 . . . . .	.6-A-120
DIRECT THE BUILDING AND COMPUTATION OF A NON-NUCLEAR FIRE PLAN WITH THE BCT/LCU	
TASK ANGL.5.55 . . . . .	.6-A-121
DIRECT THE BUILDING AND COMPUTATION OF A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE BCT/LCU	
TASK ANGL.5.56 . . . . .	.6-A-121
DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE BCT/LCU	
TASK ANGL.5.57 . . . . .	.6-A-122
DIRECT THE PREPARATION AND MAINTENANCE OF THE MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) FILE MANAGEMENT SYSTEM WITH THE BCT/LCU	
TASK ANGL.5.58 . . . . .	.6-A-122
CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION	
TASK ANGL.5.59 . . . . .	.6-A-123
ADJUST NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK ANGL.5.60 . . . . .	.6-A-124
CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK ANGL.5.61 . . . . .	.6-A-124
CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION USING NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK ANGL.5.62 . . . . .	.6-A-125
CONDUCT A DANGER CLOSE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK ANGL.5.63 . . . . .	.6-A-125
CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION USING MEAN POINT OF IMPACT (MPI) ADJUSTMENTS	
TASK ANGL.5.64 . . . . .	.6-A-126
RECORD A NAVAL SURFACE FIRE SUPPORT TARGET AS A TARGET	
TASK ANGL.5.65 . . . . .	.6-A-127
REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK ANGL.5.66 . . . . .	.6-A-127
CONDUCT A NAVAL SURFACE FIRE SUPPORT MISSION USING TIME FUZES IN EFFECT	
TASK ANGL.5.67 . . . . .	.6-A-128
CONDUCT AN ILLUMINATION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK ANGL.5.68 . . . . .	.6-A-128
CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK ANGL.5.69 . . . . .	.6-A-129
CONDUCT A SIMULTANEOUS TARGET MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK ANGL.5.70 . . . . .	.6-A-129
CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	

TASK	ANGL.5.71	6-A-130
	CONDUCT A DESTRUCTION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)	
TASK	ANGL.5.72	6-A-130
	MAINTAIN INFORMATION ON FIRE SUPPORT STATUS CHART	
TASK	ANGL.5.73	6-A-131
	PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST	
TASK	ANGL.5.74	6-A-132
	DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN	
TASK	ANGL.5.75	6-A-132
	LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM	
TASK	ANGL.5.76	6-A-133
	PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE QUICK CRATERS	
TASK	ANGL.5.77	6-A-133
	PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE DELAY CRATERS	
TASK	ANGL.5.78	6-A-134
	PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS	
TASK	ANGL.5.79	6-A-135
	PERFORM SHELL FRAGMENT ANALYSIS	
TASK	ANGL.5.80	6-A-135
	SUBMIT STANDARD SHELLING, MORTARING, AND BOMBING REPORT	

ENCLOSURE (6)

MOS ANGL, FIRE SUPPORT HAN

DUTY AREA 1 - PARACHUTING

TASK: ANGL.1.1 PERFORM PREJUMP TRAINING

CONDITION(S): Given mockup aircraft, any main parachute in the current unit inventory and reserve, helmet, combat equipment, and a parachute landing fall pit.

STANDARD: The Marine demonstrates the proper knowledge of techniques used in airborne operations, per FMFM 7-42/FM 57-230.

PERFORMANCE STEPS:

1. Attend jump brief.
2. Review five points of performance.
3. Review collisions and entanglements.
4. Review towed parachutist procedures.
5. Review malfunctions.
6. Review activation of the reserve.
7. Review emergency landings.
8. Review actions in the aircraft.
9. Review exit procedures.
10. Review landing procedures/five points of contact.
11. Review equipment recovery procedures.

REFERENCE(S):

1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS:

1. Prejump training is mandatory for all personnel involved in jump operations to be conducted within 24 hours prior to airborne operations.

TASK: ANGL.1.2 EXECUTE PREJUMP TRAINING FOR THE INTENTIONAL WATER JUMP

CONDITION(S): Given a controlled water environment (pool) with main canopy stretched across the top of the water, and suspended harness, while wearing pro-tech helmet.

STANDARD: The Marine demonstrates-the ability to successfully exit the parachute harness, and is able to prevent fouling in the canopy and suspension lines.

PERFORMANCE STEPS:

1. Complete harness training.
2. Complete wet nylon training.
3. Demonstrate correct technique of following seams of parachute to outer edge and clear parachute.

Appendix A to
ENCLOSURE (6)

4. Demonstrate correct technique to push wet parachute out of water to form an air pocket and breathe from the same.

REFERENCE(S):

- 1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS:

- 1. Must be performed within 24 hours of intentional water jump.
- 2. A corpsman with resuscitator and safety swimmer are required for swim training.

TASK: ANGL.1.3 PREPARE INDIVIDUAL COMBAT EQUIPMENT FOR PARACHUTE OPERATIONS

CONDITION(S): Given individual combat equipment, H-Harness, and lowering line.

STANDARD: The Marine will inspect rig and inspect his individual combat equipment, per FMFM 7-42/FM 57-230, and pass the Jumpmasters equipment inspection.

PERFORMANCE STEPS:

- 1. Prepare helmet.
- 2. Prepare individual assigned weapon.
- 3. Prepare container, weapons, and individual equipment (CWIE), as required.
- 4. Prepare M-1950 weapon's case.
- 5. Prepare combat pack (ALICE) with harness and lowering line.
- 6. Prepare cold weather/arctic equipment, as required.

REFERENCE(S):

- 1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS:

- 1. Unit SOP's specify ways of packing equipment and other mission essential items consistent with safety requirements and FMFM 7-42/FM 57-230.

TASK: ANGL.1.4 DON PARACHUTE, RESERVE, AND COMBAT EQUIPMENT FOR PARACHUTE OPERATIONS

CONDITION(S): Given a main parachute, T-10 reserve and individual combat equipment.

STANDARD: The Marine passes the Jumpmaster's equipment inspection in compliance with FMFM 7-42/FM 57-230 and unit SOP's.

PERFORMANCE STEPS:

- 1. Don and adjust main parachute.
- 2. Don T-10 reserve.
- 3. Don and strap helmet.
- 4. Don and adjust strap, or if required, CwIE.

5. Don ALICE pack with harness and lowering line.
6. Don M-1950 weapons case, as required.
7. Don and adjust cold weather/arctic equipment, as required.

REFERENCE(S):

1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.5 EXECUTE JUMP COMMANDS FOR FIXED WING AIRCRAFT

CONDITION(S): Given a fixed wing aircraft (C-141/C-130, or C-17), a main parachute, reserve, combat equipment, and helmet, while preparing to execute airborne operations.

STANDARD: The Marine will react to the given jump command and execute actions prescribed by that command.

PERFORMANCE STEPS:

1. Get ready.
2. Stand up - Outboard personnel.
3. Stand up - Inboard personnel.
4. Hook up.
5. Check static lines.
6. Check equipment.
7. Sound off for equipment check.
8. Stand by.
9. Go.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.6 EXECUTE JUMP COMMANDS FOR CH-53 AND CH-46

CONDITION(S): Given CH-53/CH-46, main parachute, reserve, combat equipment, and helmet, while preparing to execute airborne operations.

STANDARD: The Marine will react to the given jump command and execute actions prescribed by that command.

PERFORMANCE STEPS:

1. Get ready.
2. Stand up.
3. Hook up.
4. Check static lines.

- 5. Check equipment.
- 6. Sound off for equipment check.
- 7. Stand by.
- 8. Go.

REFERENCE(S):

- 1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training
- 2. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS:

- 1. The action on the command "HOOK UP" and "GO" differ from FMFM 7-41/FM 57-220.
- 2. Cover use of static line extension and reverse bite grip on static line.
- 3. Jumpers will receive instruction on procedures during Jumpmaster brief and prejump training.

TASK: ANGL.1.7 EXECUTE JUMP COMMANDS FOR UH-1/UH-60

CONDITION(S): Given UH-1/UH-60, a main parachute, reserve, combat equipment, and helmet, while preparing for and executing airborne operation.

STANDARD: The Marine will react to the given jump command and execute actions prescribed by that command.

PERFORMANCE STEPS:

- 1. Execute the following jump commands on the ground:
 - a. Hook-up.
 - b. Check static lines.
 - c. Check equipment.
 - d. Sound off for equipment check.
- 2. Execute the following jump commands in the air:
 - a. Unbuckle.
 - b. Sit in the door.
 - c. Go.

REFERENCE(S):

- 1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.8 DEMONSTRATE THE USE OF A STATIC LINE EXTENSION

CONDITION(S): Given main parachute, reserve, and helmet, and a static line extension per Marine, while under the supervision of the Jumpmaster.

STANDARD: Per the reference, demonstrate the proper use of the static line extension.

PERFORMANCE STEPS:

1. Ensure the static line extension is passed through the protective sleeve.
2. Hook the static line snaphook to the static line extension and insert the safety wire.
3. Slide the protective sleeve over the static line snaphook.
4. Take a reverse bight (at waist level).
5. Get approximately 8 inches of the static line in right hand.
6. Include the static line snaphook and the protective sleeve in the grasp.
7. Ensure static line is routed properly.

REFERENCE(S):

1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.9 EXECUTE EXIT PROCEDURES FOR FIXED WING AIRCRAFT

CONDITION(S): Given a main parachute, reserve, helmet, and a fixed wing aircraft while under the supervision of the Jumpmaster.

STANDARD: Per the reference, the Marine executes exit procedures using the proper techniques for exiting the paratroop door of the aircraft.

PERFORMANCE STEPS:

1. Move to the door at a normal walking pace without shuffling on the command "GO".
2. Pass the static line to the safety.
3. Place hands on ends of reserve parachute.
4. Exit at an angle of about 20-30 degrees toward the rear of the aircraft.
5. Walk off platform, do not jump.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.10 EXECUTE EXIT PROCEDURES FOR CH-53 AND CH-46

CONDITION(S): Given a static line extension, parachute, reserve, and helmet, CH-53 or CH-46 while under the supervision of the Jumpmaster.

STANDARD: The Marine will react to the given jump command and execute actions prescribed by that command.

PERFORMANCE STEPS:

1. Keep ears and eyes open on Jumpmaster at all times.

- 2. Maintain good control of static line while inside the aircraft.
- 3. Maintain one second interval between each jumper.
- 4. walk off ramp.

REFERENCE(S):

- 1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.11 EXECUTE EXIT PROCEDURES FOR UH-1/UH-60 AIRCRAFT

CONDITION(S): Given main parachute, reserve, helmet, and one static line per Marine, a UH-1 or UH-60 while under the supervision of a Jumpmaster.

STANDARD: Per the reference, the Marine executes exit procedures using the proper technique to exit the UH-1 and UH-60 aircraft.

PERFORMANCE STEPS:

- 1. Keep ears and eyes open on Jumpmaster at all times.
- 2. On the command "STAND BY", the number 1 jumper places both hands, palms down, on the cargo floor alongside his thighs and awaits the next command. Numbers 2,3,5,6, and 7 place both hands, palms down on the cargo floor and await the next command. Numbers 4 and 8 remain in place.
- 3. Upon receiving the command "GO", the Jumpmaster gives a sharp tap on the rear of the parachutist's helmet. Each parachutist is tapped out in numerical order. First, numbers 1 through 4 in the right door, then parachutists 5 through 7 in the left door. When tapped, each parachutist pushes up and out with both hands.

REFERENCE(S):

- 1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.12 EXECUTE THE FIVE POINTS OF PERFORMANCE

CONDITION(S): Given a position in a stick, main parachute, reserve, helmet, and the command "GO" while under the supervision of the Jumpmaster.

STANDARD: Properly execute the five points of performance per FMFM 7-41/FM 57-220.

PERFORMANCE STEPS:

- 1. Check body position and count.
- 2. Check canopy and gain canopy control.
- 3. Keep a sharp look out during descent.
- 4. Prepare to land.
- 5. Land.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS:

1. The first point of performance "check body position and count". The count will be modified depending on type of aircraft being jumped.
 2. The forth point of performance will be modified if jumping with combat equipment and also will be covered in the jump brief.
-

TASK: ANGL.1.13 MANEUVER THE MC1-1B/T-10 PARACHUTE

CONDITION(S): Given MC1-1B/T-10 parachute, reserve, helmet, and a Marine under canopy.

STANDARD: Execute the proper procedures to maneuver the MC1-1B/T-10 parachute, per the reference.

PERFORMANCE STEPS:

1. Determine wind direction.
2. Execute "Holding."
3. Execute "Running."
4. Execute "Turning."
5. Execute "Slipping" (T-10 only).

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.14 PERFORM PARACHUTE LANDING FALL

CONDITION(S): Given a Marine, main parachute, reserve, and helmet.

STANDARD: The Marine will perform a proper parachute landing fall, per FMFM 7-41/FM 57-220.

PERFORMANCE STEPS:

1. Perform a front right parachute landing fall.
2. Perform a front left parachute landing fall.
3. Perform a rear right parachute landing fall.
4. Perform a rear left parachute landing fall.
5. Perform a right side parachute landing fall.
6. Perform a left side parachute landing fall.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.15 REACT TO ACCIDENTAL ACTIVATION OF RESERVE PARACHUTE INSIDE THE AIRCRAFT

CONDITION(S): Given aircraft, main parachute and reserve, and the accidental activation of a reserve parachute inside the aircraft.

STANDARD: React to the accidental activation by performing corrective actions, per FMFM 7-42/FM 57-230.

PERFORMANCE STEPS:

1. Contain reserve, jumper moves away from any open door.
2. Canopy of the reserve is pulled outside of the aircraft:
 - a. Jumper exits the aircraft as quickly as possible, whether he has hooked up, or not.
 - b. Any parachutist between the jumper and the door must exit immediately.

REFERENCE(S):

1. FMFM 7-42/FM 57-230, Advanced Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.16 REACT TO TOTAL PARACHUTE MALFUNCTION AND A DELAYED OPENING

CONDITION(S): Given a main parachute, reserve, and helmet, a jumper has not received the opening shock caused by the inflation of the main parachute canopy.

STANDARD: The Marine successfully activates the reserve parachute per, FMFM 7-41/FM 57-220.

PERFORMANCE STEPS:

1. Remain in a good tight body position.
2. Feet and knees together.
3. Grasps the left carrying handle of the reserve parachute with left hand.
4. Turns head left or right.
5. Pulls rip cord grip with right hand and drops it to the ground.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.17 REACT TO PARTIAL PARACHUTE MALFUNCTION

CONDITION(S): Given a main parachute, reserve, and helmet, the Marine has a partial parachute malfunction on a jump.

STANDARD: Per the reference, the Marine successfully completes the procedure for the malfunction.

PERFORMANCE STEPS:

1. React to the complete inversion:
 - a. If canopy is damaged or if risers prevent jumper from checking canopy, activate reserve immediately.
 - b. Reverse maneuvering techniques if the complete inversion occurs with an MC1-1B/C. (The T-U shaped modification may be located to the jumper's front; therefore, the jumper must reverse his maneuvering techniques.)
2. React to the stable and spinning semi-inversion or Mae West:
 - a. Activate the reserve parachute immediately.
 - b. Use the down and away method.
3. React to the semi-inversion with roll or cigarette roll:
 - a. Snap back into a tight body position.
 - b. Activate the reserve parachute using the pull drop method.
4. React to blown sections:
 - a. Activate the reserve parachute.
 - b. Use the down and away method.
5. React to broken suspension lines:
 - a. Immediately activate the reserve parachute if rate of descent is faster than fellow jumpers.
 - b. Use the down and away method.
6. React to broken control lines:
 - a. Control the canopy by pulling only one of the rear risers in the direction wished to turn, if one or both control lines on the MC1-1B are broken.
 - b. Anticipate turns earlier and react faster because the parachute will turn slower.
 - c. The jumper should use only the rear set of risers.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.18 REACT TO TWISTED RISERS AND SUSPENSION LINES

CONDITION(S): Given a main parachute, reserve, and helmet, a Marine under canopy, and twisted risers and suspension lines.

STANDARD: Per the reference, the Marine reacts to twists as required.

PERFORMANCE STEPS:

1. Reach behind the head.
2. Grasp a set of risers in each hand, thumbs down, palms to front.
3. Pull outward.
4. Kick legs in a bicycle motion until the last twist comes out.

5. Activate reserve chute if twists are all the way up and jumper cannot move head up and if jumper's rate of descent is faster than fellow jumpers.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.19 REACT TO AVOID A COLLISION OR ENTANGLEMENT BETWEEN JUMPERS

CONDITION(S): Given main parachute, reserve, helmet, a Marine under canopy, and in close proximity to a fellow jumper.

STANDARD: The Marine demonstrates the proper procedures when reacting to avoid a collision or entanglement, per FM 57-220.

PERFORMANCE STEPS:

1. Execute a right turn or slip away to avoid a collision.
2. Lower jumper has right of way.
3. If contact is imminent, assume spread eagle position.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.20 PERFORM EMERGENCY PROCEDURES FOR ENTANGLEMENT WITH MC1-1B/T-10 PARACHUTE

CONDITION(S): Given a parachute, reserve, helmet, and the wind direction and entangled jumper with a fellow Jumper.

STANDARD: Per the reference, the Marine correctly executes procedures for MC1-1B/T-10 parachute entanglement.

PERFORMANCE STEPS:

1. Remain where you are (MC1-1B).
2. Activate reserve parachute using the down and away method (MC1-1B).
3. For T-10, upper jumper grabs the parachute and moves down the suspension lines of the lower parachutist until each jumper can hold the main lift web of each others parachute.
 - a. If neither parachutist has a fully inflated canopy, the upper parachutist activates his reserve.
 - b. If both canopies collapse, both jumpers activate reserve parachutes.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.21 PERFORM EMERGENCY PROCEDURES FOR A TREE LANDING

CONDITION(S): Given MC1-1B/T-10 parachute, reserve, and helmet, the Marine is in an emergency tree landing situation.

STANDARD: Marine will react by performing emergency tree landing procedures, per FMFM 7-41/FM 57-220.

PERFORMANCE STEPS:

1. Attempt to avoid the obstacle (with slips or turns).
2. Assume a normal prepare-to-land attitude.
3. Retain combat equipment (if not already lowered).
4. Check below, then jettison combat equipment (if already lowered).
5. Maintain canopy control until making contact with trees.
6. Rotate arms inward and presses elbows firmly down against the reserve.
7. Prepare to execute a parachute landing fall (PLF) if passing through the trees.
8. If hung up in tree:
 - a. Grabs risers high and tugs to pull free (prepare to do good PLF in case he drops).
 - b. Lowers combat equipment (if not jettisoned).
 - c. Activate the reserve parachute and climb down the outside of it if hung up in trees.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.22 PERFORM EMERGENCY PROCEDURES FOR A WATER LANDING

CONDITION(S): Given a main parachute, reserve, helmet, and a situation which requires an emergency water jump landing.

STANDARD: The Marine will perform proper water jump landing procedures per FMFM 7-41/FM 57-220 and FMFM 7-42/FM 57-230.

PERFORMANCE STEPS:

1. Prepare to land.
2. Remain well seated in the harness saddle.
3. Remove helmet, look below and drop it.
4. Undo lower tie down on weapons carrying case.
5. Locate the two 18-inch attaching straps or harness release on combat equipment.
6. Look below and make sure area is clear, pull down and out on the straps or utilize single point release to either lower or jettison combat equipment.
7. Pull the quick release in waistband.
8. Unfasten the left side of reserve and push it behind the right arm.
9. Remove all equipment secured to the parachute harness that may hinder its removal in the water.

Appendix A to
ENCLOSURE (6)

10. If applicable, release the chest strap and continue to maneuver parachute until just prior to entering the water.
11. Assume a prepare-to-land attitude with feet and knees together but with hands grasping the quick ejector snaps of both leg straps or prepared to activate the harness single point release. Release the leg straps or activate the harness single point release when feet touch the water.
12. Remain in this position until the balls of the feet make contact with the water.
13. Prepare to do a normal parachute landing fall if the water proves to be shallow.
14. Swim upstream or upwind away from the equipment.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS:

1. When wearing the B-5 (vest-type Mae West), the parachutist does not inflate the life preserver until the parachute harness is removed. The force of inflation, if restricted by harness, may crush his ribs.
2. If the jumper is wearing the B-7 life preserver do not remove the harness or equipment (the B-7 will support 500 pounds). Activate the B-7 after checking the canopy and prior to entering the water.

TASK: ANGL.1.23 PERFORM EMERGENCY PROCEDURES FOR A WIRE LANDING

CONDITION(S): Given a parachute, reserve, helmet, and a situation involving an emergency wire landing.

STANDARD: Marine will perform a proper emergency procedures per FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training.

PERFORMANCE STEPS:

1. Attempt to avoid the obstacle.
2. Keep feet and knees together and toes pointed downward.
3. Lower, check below, then jettison combat equipment.
4. Holds hands high inside the front risers with palms out.
5. Keeps chin on his chest and body straight.
6. Prepare to do a PLF.
7. If the parachutist contacts wires:
 - a. Initiate a rocking motion.
 - b. Push forward on the front set of risers.
 - c. Attempt to work through the wires.
 - d. Prepare to do a PLF.
8. If unable to pass through wire, remain motionless until help arrives and power is turned off.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.24 EXECUTE TOWED JUMPER PROCEDURE

CONDITION(S): Given a main parachute reserve, helmet, and situation requiring the execution of towed Jumper procedures.

STANDARD: Properly describe towed jumper procedures under supervision of the Jumpmaster and per FMFM 7-41/FM 57-220.

PERFORMANCE STEPS:

1. Remain in a good tight body position.
2. Place the right hand over the reserve ripcord grip.
3. Activate the reserve by using the pull drop method if cut free.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.25 RECOVER FROM PARACHUTE DRAG DURING HIGH WIND CONDITIONS

CONDITION(S): The Marine is being dragged by MC1-1B/T-10 canopy.

STANDARD: The Marine executes the hand to shoulder or hand assist method of releasing the canopy.

PERFORMANCE STEPS:

1. Execute the following steps for the hand to shoulder method:
 - a. Release the canopy from the harness by inserting the thumbs of both hands through the cable loops of the cable loop release assemblies.
 - b. Pull out and away from the body with a short, quick jerk or tug.
2. Execute the following steps for the hand assist method:
 - a. Release one riser from the harness by inserting one thumb through one cable loop of the canopy release assembly.
 - b. Support that hand with the other hand.
 - c. Pull out and down.
 - d. Repeat this procedure with the other canopy release assembly if the canopy does not collapse.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.26 IDENTIFY THE BUDDY-ASSIST METHOD OF RECOVERY

CONDITION(S): Given a jumper who cannot help himself, being dragged by an inflated canopy.

STANDARD: The Marine will describe the buddy assist method for when another jumper on the ground quickly collapses the drag parachutist's parachute.

PERFORMANCE STEPS:

1. Grasp the apex or skirt of the jumper's canopy.
2. Pull it into the direction of the wind and collapse it.
3. Activate the canopy release assembly to detach the canopy.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.1.27 EXECUTE RECOVERY OF AIRBORNE EQUIPMENT ON DROP ZONES

CONDITION(S): Given MCl-1B parachute canopy, harness, kit bag, and any other items or equipment used during jump.

STANDARD: Recover items for reuse when situation per bury, conceal, or submerge in an operational environment.

PERFORMANCE STEPS:

1. Execute the following steps for when situation permits:
 - a. Place the harness on the inside of the aviator kit bag.
 - b. Roll the canopy into a "figure eight" and place inside the aviator kit bag.
 - c. Close the kit bag using the snap fasteners.
 - d. Attach a T-10 reserve to the kit bag.
2. Execute the following steps as required:
 - a. Bury.
 - b. Conceal.
 - c. Sink.

REFERENCE(S):

1. FMFM 7-41/FM 57-220, Basic Parachuting Techniques and Training

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 2 - BASIC TACTICAL SKILLS

TASK: ANGL.2.1 ORIENT A MAP USING A LENSATIC COMPASS

CONDITION(S): Given a lensatic compass and a map.

STANDARD: The Marine must orient the map to within 1 degree, per the reference.

PERFORMANCE STEPS:

1. With the map in a horizontal position, the compass is placed parallel to a north-south grid line with the cover side of the compass pointing toward the top of the map. This will place the black index line on the dial of the compass, parallel to grid north. Since the needle of the compass points to magnetic north, we have a declination diagram on the face of the compass formed by the index line and the compass needle.
2. Rotate map and compass until the directions of the declination diagram formed by the black index line and the compass needle match the directions shown on the declination diagram printed on the margin of the map. The map is then oriented.

REFERENCE(S):

1. FM 21-26, Map Reading

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.2 LOCATE YOUR POSITION DURING A TERRAIN WALK

CONDITION(S): Given a map, a compass, a coordinate scale/protractor, and a terrain walk of 6000 meters.

STANDARD: The Marine must express his location as a six-digit grid within 30 seconds after being halted, to within 200 meters of the actual location, per the references.

PERFORMANCE STEPS:

1. Monitor your location throughout the terrain walk.
2. Orient yourself when halted.
3. Announce the grid coordinate to your position.

REFERENCE(S):

1. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
2. FM 21-26, Map Reading

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.3 NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER POINT, MOUNTED

CONDITION(S): Given a map, a coordinate scale/protractor, a compass, and a vehicle with driver. You will be mounted in a vehicle with cross-country capability and will be tasked to move from a known start point to one or more distant points.

Appendix A to
ENCLOSURE (6)

STANDARD: The Marine must direct the driver to proceed to the designated point(s) using terrain association and dead reckoning, per the reference.

PERFORMANCE STEPS:

1. Direct the driver to the distant point by using dead reckoning.
 - a. Move away from the vehicle.
 - b. Set azimuth on compass and select steering mark.
 - c. Identify steering mark to the driver.
2. Drive to the distant point.

REFERENCE(S):

1. FM 21-26, Map Reading

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.4 LOCATE POSITIONS IN A MOBILE ENVIRONMENT

CONDITION(S): Given a map, a coordinate scale/protractor, a compass, and a vehicle with driver.

STANDARD: The Marine must determine his position, upon stopping during mounted travel, with a 6 digit grid to within 200 meters of the actual location within 2 minutes; be able to locate terrain features while on the move to within 200 meters, and while riding in an enclosed vehicle, i.e., not being able to view the surrounding terrain during travel, and then stopping, be able to identify his location within 200 meters of the actual location within 4 minutes, per the reference.

PERFORMANCE STEPS:

1. Determine your position after being halted, while during travel you were able to view surrounding terrain.
2. Determine your position after being halted, while during travel you were not able to view surrounding terrain.
3. Determine the positions of terrain features while on the move.

REFERENCE(S):

1. FM 21-26, Map Reading

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.5 LOCATE POSITION ON A MAP OR GROUND BY RESECTION

CONDITION(S): Given a map, a compass, plotting equipment, two identifiable terrain features both visible and on the map, and the need to determine your unknown location.

STANDARD: The Marine must locate himself by a six-digit grid to within 100 meters of the actual grid within 5 minutes, per the reference.

PERFORMANCE STEPS:

1. Locate the two points.
2. Shoot an azimuth to the first point using the compass.

3. Convert to back-azimuths by adding 180 degrees if the azimuth is 180 degrees or less or subtracting 180 degrees if the azimuth is 180 degrees or greater. The back azimuth of 180 degrees may be stated as either 0 or 360 degrees.
4. Place the protractor on the map, make a tickmark to determine the azimuth.
5. Draw a line on the map from the first point along the back azimuth.
6. Repeat steps for the second point.
7. Plot the location where the lines intersect and use terrain association to determine the grid coordinates.

REFERENCE(S):

1. FM 21-26, Map Reading

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.6 DETERMINE THE ELEVATION OF A POINT ON THE GROUND USING A MAP

CONDITION(S): Given the Marine is in the field during daylight while at a known location on the ground, a standard 1:50,000 scale military map of the area, and a designated prominent terrain feature.

STANDARD: The Marine must determine the correct elevation of the terrain feature to within half the contour interval, per the reference.

PERFORMANCE STEPS:

1. Locate the point on the map.
2. Determine the contour interval of the map from the marginal information.
3. Locate the index contour line nearest the point for which the elevation is being sought.
4. Count the number of contour lines, up or down, that must be crossed to go from the numbered lines to the point.
5. Determine the elevation to the point.

REFERENCE(S):

1. FM 21-26, Map Reading

ADMINISTRATIVE INSTRUCTIONS:

1. If the point is on contour lines, its elevation is that of the contour.
2. Points less than one-fourth the distance between lines are considered to be the same as the elevation of the nearest line.
3. Points one-fourth to three-fourths the distance from the lower line are considered to be at an elevation half the contour interval above the lower line.
4. To estimate the elevation of the top of an unmarked hill, add half the contour interval to the elevation of the highest contour line around the hill.
5. To estimate the elevation of the bottom of a depression, subtract half the contour interval from the elevation of the lowest contour around the depression.
6. On maps that do not show elevation and relief in as much detail as needed, supplementary contour lines may be used.

TASK: ANGL.2.7 LOCATE YOUR POSITION USING A PORTABLE LIGHTWEIGHT GLOBAL POSITIONING SYSTEM (GPS)

CONDITION(S): Given a portable lightweight global positioning system (GPS), map, coordinate scale/protractor, a compass, plotting equipment, the need to determine your unknown location, and the reference.

STANDARD: The Marine must locate himself by an eight digit grid to within 10 meters of the actual grid (to include altitude), within 1 minute of the GPS acquisition of required satellites.

PERFORMANCE STEPS:

1. Initiate appropriate GPS function to acquire required satellites.
2. Select reference datum as required.
3. Select the desired coordinate system to be used (usually Military Grid Reference System) (MGRS).
4. Select the time offset. (UTC or Local)
5. Select distance units. (Usually Metric)
6. Select angular units. (Usually Degrees)
7. Select azimuth. (True or Magnetic North)
8. Activate averaging function.
9. Activate appropriate function to determine position.
10. Read the grid coordinate from the receiver.
11. Plot your position on the map.
12. Confirm your position by resection with the lensatic compass.

REFERENCE(S):

1. GPS Receiver Operation and Maintenance Guide

ADMINISTRATIVE INSTRUCTIONS:

1. If only 3 satellites (SVs) are tracking, only two dimensional positions will be available.
-

TASK: ANGL.2.8 NAVIGATE FROM ONE POINT ON THE GROUND TO ANOTHER USING A PORTABLE LIGHTWEIGHT GLOBAL POSITIONING SYSTEM

CONDITION(S): Given a GPS, a map, coordinate scale/protractor, a compass, plotting equipment, the need to navigate from one point on the ground to another, and the reference.

STANDARD: The Marine must navigate to the designated points utilizing the GPS.

PERFORMANCE STEPS:

1. Initiate appropriate GPS function to acquire required satellites.
2. Select the reference datum.

3. Select the desired coordinate system to be used, usually the Military Grid Reference System (MGRS).
4. Select the time offset (UTC or local).
5. Select distance units (usually metric).
6. Select angular units (usually degrees).
7. Select azimuth (true or magnetic North).
8. Activate averaging function.
9. Activate appropriate function to determine position.
10. Read the grid coordinate from the receiver.
11. Plot your position on the map.
12. Confirm your position by resection with the lensatic compass.
13. Determine the position(s) to which you desire to go and plot it on the map.
14. Select the appropriate navigation function on the receiver.
15. Enter the position(s) to which you desire to go.
16. Select the appropriate control to initiate navigation function.
17. Navigate to your intended point(s) using the data shown on the screen.
18. Always confirm screen data with the lensatic compass.

REFERENCE(S):

1. GPS Receiver Operation and Maintenance Guide

ADMINISTRATIVE INSTRUCTIONS:

1. If only three satellites (SV's) are tracking, only two dimensional positions will be available.

TASK: ANGL.2.9 PREPARE A PANORAMIC TERRAIN SKETCH

CONDITION(S): In a tactical environment, day and night, given paper, pencil, binoculars, an observation post, a coordinate scale/protractor and an information sheet containing the zone of operation and responsibility, or an objective.

STANDARD: The Marine must present an accurate panoramic representation of terrain in the zone of action/objective area, per the references.

PERFORMANCE STEPS:

1. Describe terrain features in the objective area/zone of action.
2. Determine scale to be used on the sketch.
3. Demonstrate how a reference point is used on a sketch.
4. Demonstrate a method of measuring figures at a distance.
5. Demonstrate four methods of locating a terrain feature.
6. Draw a panoramic representation of the terrain within the objective area/zone of action.

7 Apr 97

- a. Draw the skyline first.
 - b. Draw intermittent crests.
 - c. Draw all neutral terrain features.
 - d. Draw all man-made objects.
7. Include marginal information that is enclosed on sketches.
 8. Describe why the sketch was made in marginal information.
 9. Update as time permits.

REFERENCE(S):

1. MCI 03.32F, Reconnaissance Marine
2. FM 6-30, Observed Fire Procedures
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.10 PREPARE AND ISSUE A PATROL WARNING ORDER

CONDITION(S): Given an operations order, 1:50,000 map, and coordinate scale/protractor.

STANDARD: Prepare and issue a patrol warning order for a Fire/Firepower Control Team (FCT) within 30 minutes of issuance of order.

PERFORMANCE STEPS:

1. Prepare brief statements on the enemy and friendly situation and capabilities.
2. Clearly state the mission of the patrol.
3. List all members of the patrol.
4. Establish the chain of command.
5. Assign positions and duties in elements and teams to all patrol members.
6. Cover all necessary individual requirements in the assignment of positions and duties.
7. Follow established principles in organizing the patrol into elements and teams.
8. List all required special equipment to accomplish the mission.
9. Designate the element to carry the special equipment.
10. Select a common uniform and equipment based on weather, terrain, equipment available, and ml SS1 on.
11. Publish a time schedule which provides the date/time of the issuance of the patrol order, rehearsal, inspection schedule, and the issuance of supplies, equipment and weapons.
12. Ensure the designated patrol members understand the patrol warning order.
13. Issue specific preparation instructions to key individuals.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad

2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.11 PREPARE AND ISSUE A PATROL ORDER AND ORDER ANNEXES

CONDITION(S): Given an operation order, 1:50,000 map, coordinate scale/protractor, pencil, and paper.

STANDARD: Prepare and issue a patrol order for a Fire Control Team (FCT) ensuring each Marine understands his missions and duties. Prepare a patrol annex for movement.

PERFORMANCE STEPS:

1. Utilize patrol order format.
2. Conduct coordination with outside units while planning the patrol.
3. Request intelligence briefings and updates.
4. Conduct inspections and rehearsals.
5. Ensure all patrol members are present prior to issuing order.
6. Conduct an orientation briefing for all members prior to issuing the patrol order.
7. Use a terrain model, map sketch, or other visual aids.
8. Use an aerial photograph as a map supplement which has the scale determined and a grid superimposed.
9. Provide a patrol forecast for the patrol period.
10. Identify the size, type, and capabilities of enemy units known to be in the area of operations, or suspected locations, and recent activities.
11. Describe the terrain over which the patrol is to operate.
12. Provide planned routes of other patrols operating in the immediate area.
13. Brief the fire support plan that includes artillery, air, NSFS, and location of on call targets.
14. Identify any attachments to the patrol.
15. Specify the patrol mission.
16. Provide a complete concept of the patrols mission.
17. Specify the task of each element and all key individuals.
18. Include all coordinating instructions, i.e., time of departure and return, primary and alternate routes, organization for movement, procedures for crossing danger areas, actions on enemy contact, actions at rallying points, actions at the objective area, actions at obstacles, emergency extractions, and rules of engagement, etc.
19. Brief the patrol on actions in the event of capture, injury to personnel, and compromise.
20. Brief plan for insertion of patrol in detail as a separate annex to the patrol order.
21. Specify times and place of rehearsals and inspections.
22. Brief those administration and logistics items requiring highlighting not covered in the warning order nor previously mentioned.
23. Review all signals to be used within the patrol.

- 24. Brief communications as a separate annex to the patrol order.
- 25. Identify time and frequency of required reports to the higher command element.
- 26. Cover intrapatrol and unit challenge and password.
- 27. Specify the location of the patrol leader, assistant patrol leader, as well as element leaders during all stages of the patrol.
- 28. Ensure that all personnel understand the order and are cognizant of their duties and responsibilities.
- 29. Prepare and issues a frag order covering all areas of change from the patrol order.

REFERENCE(S):

- 1. FMFM 6-5, Marine Rifle Squad
- 2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.12 PREPARE PATROL ROUTES AND OVERLAYS

CONDITION(S): Given a tactical environment guidance from the unit commander, an operation order, a 1:50,000 map, coordinate scale/protractor and a requirement to lead a patrol.

STANDARD: The patrol leader will plan a primary and alternate patrol route based on time of departure/time of return, the mission statement, guidance from the unit commander, and the enemy situation. He will make a overlay showing the routes chosen.

PERFORMANCE STEPS:

- 1. Make a terrain analysis and select a secure primary and alternate routes based on information available.
- 2. Estimate enemy capabilities based on enemy situation given.
- 3. Plan routes based on patrols ability and time given.
- 4. Prepare a clear, concise overlay.
- 5. Indicate checkpoints, indirect fire targets, insert and extract points, patrol base, and objective rally point.
- 6. Display a legend, marginal information, and list of personnel on the patrol overlay.

REFERENCE(S):

- 1. FMFM 6-5, Marine Rifle Squad
- 2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.13 CONDUCT PATROL REHEARSALS

CONDITION(S): Given a patrol order and a warning order for a day and/or night patrol, and a FCT with equipment.

STANDARD: The Marine will conduct patrol rehearsals to ensure the operational proficiency of the FCT.

PERFORMANCE STEPS:

1. Select rehearsal site and time of rehearsals.
2. Rehearse all action to be taken. If time is limited rehearse the most critical phases.
3. Supervise and conduct rehearsals in all areas pertaining to the patrol.
4. If the patrol is to operate at night, conduct both day and night rehearsals over similar terrain.
5. Use the rehearsal to test the soundness of the patrol order and patrol organization.
6. Make final adjustments to the plan and organization based on lessons learned from the rehearsal.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad
2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.14 CONDUCT PATROL INSPECTIONS

CONDITION(S): Given a warning order and a patrol order for a day and/or night patrol, and a FCT with equipment.

STANDARD: Conduct initial and final inspections of the FCT in preparation for the patrol.

PERFORMANCE STEPS:

1. Upon receipt of the warning order and patrol order and prior to rehearsals, inspect the FCT to ensure uniforms, equipment, and weapons are complete, correct and functional.
2. Question patrol members to ensure each Marine knows:
 - a. The patrol plan (concept of the operation).
 - b. What he is to do and when he is to do it (both on the move and at the objective).
 - c. What others are to do (that will affect him).
 - d. Challenges and passwords, codes, radio call signs, frequencies, reporting times, and other pertinent details.
3. Conduct a final inspection prior to departure to ensure discrepancies found in the initial inspection have been corrected, all equipment is in working order, nothing is left behind, and that the men are ready for the mission.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad
2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.15 ENTER AND EXIT FRIENDLY LINES VIA FOOT MOVEMENT

CONDITION(S): Given an exit and entry point through friendly lines, challenge and password, PRC-77/PRC-119 radio, call signs, and frequencies.

STANDARD: Coordinate and conduct an exit of friendly lines to commence a patrol and re-enter friendly lines to conclude the patrol.

PERFORMANCE STEPS:

1. Exit friendly lines.
 - a. Select a patrol assembly area and reconnoiter the area designated by the unit commander.
 - b. If possible select a route from the assembly area through friendly positions that offer concealment from enemy view.
 - c. Identify gaps or lanes in minefields and wire obstacles, and locate local security elements through which the patrol will pass.
 - d. Upon receiving permission from the unit commander to move out, move the patrol from the rehearsal area to the assembly area.
 - e. Leave the assistant patrol leader with the patrol, move forward and make final coordination with the commander of the front line unit.
 - f. Make final coordination for the return through friendly lines.
 - g. Brief patrol members on enemy contacts/sighting by the unit oppupying the friendly lines.
 - h. Once coordination is made, move the patrol forward.
 - i. Lead the patrol through friendly lines. Once outside friendly lines dismiss the guide (if using one), issue any last minute instructions to the navigator, and ensure the patrol is in the proper formation.
2. Enter friendly lines.
 - a. Contact units occupying friendly lines via radio communications and requests permission to enter lines.
 - b. Place patrol in a secure position and have one man approach friendly lines to be recognized.
 - c. Once the man is recognized, move team through friendly lines and ensure a head count is conducted.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad
2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.16 CONTROL PATROL MOVEMENT

CONDITION(S): Acting as a patrol leader, given a FCT that has exited friendly lines, and a objective.

STANDARD: The team leader will control the movement and discipline of his team during the movement, ensuring the proper dispersion and formation is used at all times.

PERFORMANCE STEPS:

1. Determine the patrol's formation. Standard squad and fire team formations should be used based on the following considerations.
 - a. Visibility, weather, terrain, and vegetation.
 - b. Contacts with the enemy.
 - c. All-around defense (to be maintain constantly, with no exceptions).
 - d. Time allotted for the mission.
2. Exercise control.
 - a. Position where patrol can best be controlled as a whole.
 - b. Use arm and hand signals as primary means of communications.
 - c. When speaking, speak just loudly enough to be heard.
 - d. Use radios only when arm and hand signals or face to face contact is impractical.
 - e. Use planned and rehearsed sound signals.
 - f. If available, use infrared equipment as a means of sending and receiving signals.
 - g. Use luminous tape to assist in keeping visual contact with personnel.
 - h. Ensure all personnel are continuously accounted for.
3. Employ navigation techniques.
 - a. Assign one or more Marines as navigators. They will assist the patrol leader in maintaining direction by use of the compass.
 - b. Assign at least two pacers and use the average of their counts for an approximation of the distance traveled. Ensure pacers are separated so they will not influence each other's count.
 - c. Divide route into legs, with each leg starting at a recognizable point on the ground. Ensure the pacers begin the count from zero at the beginning of each leg.
4. Organize the formation to provide security while on the move, during halts, at danger areas, and upon reaching checkpoints and rally points.
 - a. Disperse the patrol consistent with control, visibility, cover, and concealment.
 - b. Employ signs and countersigns within the patrol.
 - c. As required, employ scouts to the front and rear of the formation and consistent with visibility, the terrain, vegetation, and the size of the patrol, employ scouts to the flanks.
 - d. Ensure the patrol does not silhouette itself when moving along high ground.
 - e. Avoid danger areas and take advantage of available cover and concealment.
 - f. Maintain an even pace and avoid sudden movement.
 - g. Avoid known or suspected enemy locations and built up areas, whenever possible.
 - h. For night patrols, keep Marines close together.

- (1) Emphasize silent movement.
- (2) Ensure speed of movement is kept slower.
- i. Halt the patrol occasionally to observe and listen for enemy activity.
- j. Use infiltration techniques when the enemy situation dictates it.
- 5. Employ movement control measures.
 - a. Designate checkpoints and tentative rally points before leaving friendly lines.
 - b. Designate rally points enroute to the objective.
 - (1) Designate a point within the friendly area as the initial rallying point.
 - (2) Designate enroute rallying points between the initial rallying point and the objective rallying point.
 - (3) Designate the objective rallying point at a point nearest the objective at which the patrol reassembles after the mission is accomplished.
 - c. Designate actions to be taken at rallying points before departing friendly lines.
 - (1) Recognition signals for assembly at rallying points.
 - (2) Minimum number of men and maximum amount of waiting time required before the senior man moves the rallied patrol members onward toward the objective.
 - (3) Instruction for patrol members who find themselves alone at a rallying point.
 - d. Designate a final preparation position.
- 6. Plan for crossing of danger areas before departing friendly lines. Ensure each patrol member knows exactly what to do at danger areas.
- 7. When required to halt for an extended period of time in an area not protected by friendly troops, designate a hide position.

REFERENCE(S):

- 1. FMFM 6-4, Marine Rifle Company/Platoon
- 2. FMFM 6-5, Marine Rifle Squad
- 3. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.17 CROSS DANGER AREAS

CONDITION(S): Given a FCT, a danger area, and a situation that requires the team to cross the danger area.

STANDARD: The team leader will direct the crossing of small, large, and linear danger areas.

PERFORMANCE STEPS:

- 1. Employ the appropriate signals for danger areas.
- 2. Determine whether to bypass danger area.
- 3. Choose the most secure crossing point. Cross roads or trails at or near a bend or where the road is narrow.

4. Assign near and far side security and rally points.
5. Have the near side reconnoitered.
6. Send scouts to reconnoiter the far side. This will include the reconnoitering of tentative rallying points.
7. Once clear, cross the patrol as rapidly and quietly as possible.
8. Conduct a head count on the far side of the danger area.
9. Continue on patrol.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad
2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.18 EXECUTE IMMEDIATE ACTION DRILLS

CONDITION(S): Acting as a member of a FCT in a tactical environment, and subject to unexpected enemy contact.

STANDARD: With or without order, depending on the situation and as directed in the patrol order, execute immediate action (IA) drills when unexpected contact is made with enemy forces.

PERFORMANCE STEPS:

1. If the first patrol member to detect the enemy, give the silent signal to FREEZE. If another patrol member gives the signal, halt in place, keeping the weapon at the ready, and remain absolutely motionless and quiet until further signals or orders are given.
2. If the first patrol member to hear or sight an enemy or unidentified aircraft, give the signal to FREEZE. If another patrol member gives the signal, halt in place, keeping the weapon at the ready, and remain absolutely motionless and quiet until further signals or orders are given.
3. If the first patrol member to sight and attacking aircraft, shout "AIRCRAFT FRONT (LEFT, REAR, or RIGHT)", and move into a line formation perpendicular to the direction of the oncoming aircraft.
 - a. Once on line hit the ground seeking the best cover available.
 - b. Position body perpendicular to the aircraft's direction of travel and try to present the shallowest target possible.
 - c. Fire on aircraft only upon receiving orders from the patrol leader.
4. When the signal is given to conduct a hasty ambush.
 - a. Move in the direction indicated by the signal and take up the best concealed firing position available.
 - b. Do not fire until the patrol leader initiates the ambush.
 - c. If the first member of the patrol to become aware that the patrol has been detected, before the patrol leader initiates the ambush, initiate the ambush by firing and shouting.
5. If unexpected physical contact is made with the enemy, and among those patrol members nearest to the enemy, open fire and shout "CONTACT, FRONT (RIGHT, LEFT, or REAR)". Move into the appropriate formation and follow the patrol leader's direction.

6. If caught in a near ambush (enemy within 50 meters of the patrol).
 - a. If in the killing zone, without order or signal, immediately assault directly into the ambush position. Occupy it, and continue the assault or break contact, as directed.
 - b. If not in the killing zone, maneuver against the attack force and other elements of the ambush, as directed.
7. If caught in a far ambush (enemy beyond 50 meters of the patrol).
 - a. If in the killing zone, without order or signal, immediately return fire, take the best position available, and continue firing until directed otherwise.
 - b. If not in the killing zone maneuver against the ambush force, as directed.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad
2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.19 DIRECT IMMEDIATE ACTION DRILLS

CONDITION(S): Acting as a FCT Leader, conducting a patrol in a tactical environment, and subject to unexpected enemy contact.

STANDARD: The patrol leader will direct his patrol in the conduct of immediate action (IA) drills when unexpected contact is made with enemy forces.

PERFORMANCE STEPS:

1. Ensure all patrol members have rehearsed IA drills before leaving friendly lines.
2. If the patrol sights the enemy, but is not itself detected, determine whether to make or avoid physical contact. Base decision on the patrol's assigned mission and the capability to successfully engage the enemy unit.
3. If the patrol's assigned mission prohibits physical contact, except that necessary to accomplish the mission, keep actions defensive in nature. Break physical contact, if unavoidable, quickly as possible and, if still capable, continues the mission.
4. Upon sighting of the enemy conduct an immediate halt drill.
5. If the situation permits, conduct a hasty ambush.
 - a. Signal for a hasty ambush and direct patrol members to move quickly to the right or left of line of movement, and take up the best available concealed firing positions.
 - b. Initiate the ambush by opening fire and shouting "FIRE".
 - (1) If the patrol is defensive in nature, the ambush is not initiated unless the patrol is detected.
 - (2) If the patrol is offensive in nature, allow the enemy to advance until he is in the most vulnerable position.
6. Conduct an immediate assault if attempting to make and quickly break undesired but unavoidable contact, or to decisively engage the enemy. Upon shouts of "CONTACT, FRONT (RIGHT, LEFT, or REAR)" move the patrol swiftly into a line formation and assault the enemy.

- a. When used defensively, stop the assault when the enemy withdraws and contact is broken quickly. If the enemy stands fast, carry the assault through the enemy's positions, continuing until contact is broken.
 - b. When used offensively, continue to engage the enemy until he is destroyed.
7. If the patrol is fired upon from beyond 50 meters, break contact as quickly as possible and continue the mission.
8. If the patrol is ambushed, determine if the ambush is a near ambush or a far ambush, and conduct the appropriate counter ambush drill.
- a. If caught in a near ambush (enemy within 50 meters of the patrol).
 - (1) Direct those in the killing zone to immediately assault into the ambush position, occupy it, and continue the assault or break contact.
 - (2) Direct those not in the killing zone to maneuver against the ambush force and other elements of the ambush.
 - (3) Continue the assault to either eliminate the ambush or to break contact.
 - b. If caught in a far ambush (enemy beyond 50 meters of the patrol).
 - (1) Direct the men in the killing zone to return fire and take best available positions.
 - (2) Direct the men not in the killing to maneuver against the ambush force.
 - (3) Continue the assault to either eliminate the ambush or to break contact.
9. If attacked by an aircraft, move the patrol, upon shouts of "AIRCRAFT: FRONT (LEFT, REAR, or RIGHT)", quickly into a line formation.
- a. Ensure the formation is well spread out and at a right angle to the aircraft's direction of travel.
 - b. Between attacks direct the patrol members into better positions.
 - c. Determine if aircraft should be fired upon.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad
2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.20 PERFORM SURVEILLANCE/OBSERVATION TECHNIQUES

CONDITION(S): Given a mission, an Operations (OP) log, blank spot report (SPOTREP), binoculars, a 1:50,000 military map, a sketching kit, message book, a night vision sight and night vision goggles.

STANDARD: Correctly employ surveillance/observation techniques of an assigned objective during daylight and at night.

PERFORMANCE STEPS:

1. Select an observation post.
2. Maintain an OP log.
3. Employ observation techniques using binoculars.

4. Employ observation techniques and records objective photographically using camera.
5. Employ observation techniques using night vision sights.
6. Employ observation techniques using night vision goggles.
7. Construct a sketch of the assigned objective.
8. Complete and send a SPOTREP to higher headquarters.
9. Provide a debrief upon completion of mission.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad
2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.21 DIRECT ACTIONS AT THE OBJECTIVE AREA

CONDITION(S): Given a situation and mission, 1:50,000 map, coordinate scale /protractor and a FCT.

STANDARD: Direct all actions at a given objective.

PERFORMANCE STEPS:

1. Plan for reconnaissance and security from personnel available.
2. Ensure proper sequence of actions at the objective are conducted by team members.
3. Properly select an objective rally point (ORP).
4. Utilize a five point contingency plan.
5. Select and use a vantage point.
6. Conduct a leader's reconnaissance of the objective area.
7. Position reconnaissance and security teams.
8. Select best method for conducting a point or area reconnaissance.
9. Designate the time and place for disseminating information.
10. Conduct reconnaissance and surveillance.
11. Withdraw from objective area.
12. Select a communications site.
13. Conduct communications site activities.

REFERENCE(S):

1. FMFM 6-5, Marine Rifle Squad
2. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.22 ESTABLISH A PATROL BASE

CONDITION(S): Given T/O weapon, 782 gear, and rucksack, and a six man team, in a tactical situation.

STANDARD: The Marine will select a patrol base, properly reconnoiter, occupy the base, and utilize passive and active security measures.

PERFORMANCE STEPS:

1. Select a location for the base.
 - a. Find a secret and secure position.
 - b. Terrain must have facilities suited for the erection of adequate radio antennas.
 - c. If resupply by air is expected, the base should have a convenient drop zone.
 - d. Position should have flat, dry ground, if possible, that drains quickly to allow the Marines a dry place to rest.
2. Plan for passive security of the base, based on the terrain in which the patrol base is located.
 - a. An area considered of little tactical value and has minimum enemy activity.
 - b. An area where there is ample concealment.
 - c. An area remote from human habitation.
 - d. An area near, but not on a source of water.
 - e. An area not swampy or on steep slopes.
 - f. Avoid ridgelines and topographical crests.
 - g. Avoid roads, trails, and valleys that may be natural lines of drift.
3. Plan for active security of the base.
 - a. Reconnoiter base site prior to occupation.
 - b. Establish perimeter defense.
 - c. Enforce camouflage, noise, and light discipline.
4. Occupy the patrol base.
 - a. Secretly occupy the base using deception measures.
 - b. Do not occupy the patrol base until it has been scouted and checked for suitability.
 - c. Assume a perimeter defense immediately upon moving into the position.
 - d. Keep movement and noise inside base to a minimum. Strictly control all cooking fires.
5. As required, ensure there is a suitable alarm signal for the approach of friendly or enemy troops. Alarm will not sound foreign to the environment.
6. When leaving the base, ensure all signs of occupation are removed.

REFERENCE(S):

1. FMFM 6-4, Marine Rifle Company/Platoon
2. FMFM 6-5, Marine Rifle Squad

3. FMFM 6-7, Scouting and Patrolling for Infantry Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.23 CONDUCT AN INSERT/EXTRACT VIA HELICOPTER LANDING

CONDITION(S): In a tactical environment, day and night, given individual combat equipment, rucksack, individual weapon, a helicopter, a landing zone (LZ) and a frog order.

STANDARD: As a member of a FCT, the Marine will conduct an insertion/extraction via helicopter landing.

PERFORMANCE STEPS:

1. Conduct helicopter insertion.
 - a. Give the pilot a zone brief.
 - b. Properly board the helicopter (identifies/confirms the correct LZ).
 - c. Enroute remains oriented and identifies checkpoints.
 - d. Upon touchdown, debarks the helicopter with the team; in a tactical mode; at weapons condition 1.
 - e. Move to a concealed position, provide security, establish communications with insert helicopter, or higher headquarters to report insert complete.
 - f. Orient in the correct direction.
 - g. Tactically moves out on assigned mission.
2. Conduct helicopter extraction.
 - a. Move tactically as part of the team to the extract LZ.
 - b. Establish all around security.
 - c. Correctly respond to pilot initiated communications.
 - d. Give the pilot a landing zone brief.
 - e. Mark landing zone (smoke, signal mirror, or panel) and respond to the pilot's identification of markings.
 - f. As a helicopter lands, team embarks aboard while providing security.

REFERENCE(S):

1. ST 21-75-3, Dismounted Patrolling

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.24 RAPPEL INSERT VIA HELICOPTER

CONDITION(S): In a tactical environment, day and night, given rifle, 782 gear, rucksack, gloves, snaplink, 120 ft. rappel rope rigged at standing end according to unit SOP, a UH-1, UH-60, or CH-46/CH-53 helicopter, trained rappelmaster, procedural and safety briefings.

STANDARD: Follow all instructions of the rappelmaster. Descend safely to the ground.

PERFORMANCE STEPS:

1. Don equipment.
2. Follow all instructions of the rappelmaster.
3. Correctly execute rappel.
4. Correctly clear rappel line.

REFERENCE(S):

1. Local SOTG SOP for Rope Management (Use until formal Marine Corps references are published)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.25 CONDUCT INSERTION/EXTRACTION VIA A SPECIAL PATROL
INSERTION/EXTRACTION (SPIE) OPERATION

CONDITION(S): In a tactical environment, day and night, given rifle, 782 gear, rucksack, two snaplinks, sling rope, SPIE harness, SPIE rig, helicopter, rappelmaster, procedural, and safety briefings.

STANDARD: Follow all instructions of the rappelmaster. Successfully conduct a SPIE insert i on/extraction.

PERFORMANCE STEPS:

1. Move to insert/extraction location and sets up security as part of a FCT.
2. Correctly don SPIE harness.
3. Correctly tie chest bowline with sling rope.
4. Correctly tie figure eight on running end of sling rope.
5. Correctly attach one snaplink each to SPIE harness and sling rope.
6. After SPIE line hits ground, correctly attach chest bowline snaplink to opposite 'D' ring.
7. Correctly attach chest bowline snaplink to opposite 'D' ring.
8. Ensure buddy's snaplinks are properly secured to SPIE line.
9. Continue to maintain security as remainder of team hooks up and as SPIE line lifts team from ground.
10. Maintain proper position once airborne.
11. Land safely.
12. Detach from SPIE line.

REFERENCE(S):

1. NavAir 1345-2, SPIE Manual
2. Local SOTG SOP for Rope Management (Use until formal Marine Corps references are published)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.26 CONDUCT INDIVIDUAL ROPE MANAGEMENT

CONDITION(S): Given a 120 foot green line, a steel non-locking snaplink, a steel locking "Stubai", and a 14 foot sling rope.

STANDARD: The Marine will demonstrate proper knot tying and conduct proper rope management.

PERFORMANCE STEPS:

1. Inspect the ropes and snaplinks for serviceability.
2. Care for and maintain ropes.
3. Use proper rope terminology when discussing the conditions of the rope with other Marines.
4. Tie the following knots:
 - a. Square knot w/two overhand.
 - b. Swiss seat.
 - c. Around the body bowline.
 - d. Figure eight.
 - e. Overhand.
 - f. Double sheet bend.
 - g. Bowline.
 - h. Round turn w/two half hitches.
 - i. Clove hitch.
 - j. Butterfly.
 - k. Bowline on a coil.
 - l. Prusik.
 - m. Transport tightening hitch.

REFERENCE(S):

1. Local SOTG SOP for Fast Rope (use until formal Marine Corps references are published)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.27 DIRECT A HELICOPTER LANDING/TAKEOFF

CONDITION(S): In a tactical environment, day and night, given two batons/ flashlights with infra red (JR) covers (as appropriate), an LZ, a helicopter, 782 gear, rucksack, rifle, goggles, and a compass.

STANDARD: The Marine will direct the helicopter utilizing the eleven hand and arm signals.

PERFORMANCE STEPS:

1. Ensure the landing zone was properly marked.
 - a. During daylight mark the landing zone with either smoke grenades or air panels. If marking with smoke, have the pilot identify the color of the smoke.
 - b. During night time use the glide angle indicator light (GAIL) system, if available, or field expedients methods (i.e. flashlights with IR covers, heat tabs, strobe lights, etc.).
2. Ensure a landing zone brief was given to the pilot.
3. Use hand and arm signals to direct landing/takeoff (flashlights with wands or IR covers required at night).
 - a. Prepare for guidance.
 - b. Forward.
 - c. Backward.
 - d. Move right.
 - e. Move left.
 - f. Upward.
 - g. Downward.
 - h. Land.
 - i. Takeoff.
 - j. Waveoff.
 - k. Hover.

REFERENCE(S):

1. MCI 03.32F, Reconnaissance Marine

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.28 STERILIZE LANDING ZONE

CONDITION(S): With one FCT necessary tools and equipment, an LZ, and materials found in the area.

STANDARD: Return LZ to the condition it was in prior to the operation.

PERFORMANCE STEPS:

1. Police or obliterate cigarette butts, candy and gum wrappers, equipment, and other signs of occupancy, such as crushed undergrowth, heel scuffs, trails, and human waste.
2. Recover all rigging straps and other air delivery equipment.
3. Assign an individual at the recovery collection point to account for air items and packages.

REFERENCE(S):

1. FM 31-11C-S, Special Forces Soldier's Manual

Appendix A to
ENCLOSURE (6)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.29 GIVE A LANDING ZONE BRIEF

CONDITION(S): Given a landing zone brief format, a radio with frequencies and call signs, and appropriate mission orders.

STANDARD: Correctly transmit a landing zone brief.

PERFORMANCE STEPS:

1. Establish and maintain communications with the helicopter.
2. Insert mission information into LZ brief format.
3. Transmit brief.

REFERENCE(S):

1. FMFM 3-3, Helicopter Operations
2. MCI 03.32F, Reconnaissance Marine

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.2.30 SELECT LANDING ZONE FOR ROTARY WING AIRCRAFT

CONDITION(S): Day and night, given a mission, type and number of aircraft, and training area.

STANDARD: Correctly select appropriate size for landing zone/site/point per mission requirement.

PERFORMANCE STEPS:

1. Calculate the size of landing point, day and night for the type of aircraft to land (UH-1, CH-46, CH-53, AH-1W, or UH-60).
2. Ensure the landing zone has the acceptable limits of approach/ departure routes, landing surfaces, slope of ground, and obstacles in and around landing zone.

REFERENCE(S):

1. MCI 03.32F, Reconnaissance Marine

ADMINISTRATIVE INSTRUCTIONS:

1. The Marine will be able to describes the difference between a landing zone, a landing site, and a landing point.
-

TASK: ANGL.2.31 ESTABLISH A LANDING ZONE (DAY/NIGHT)

CONDITION(S): In a tactical environment day and night, given equipment, smoke grenades, colored panels, heliport lighting system, a strobe Light, two flashlights with IR covers or wands, two Marines, a clear zone,and a mission order.

STANDARD: The Marine will select the site which meets the listed criteria and within two minutes (daylight)/twenty minutes (night), mark a landing site for a helicopter.

PERFORMANCE STEPS:

1. Establish a landing zone (day).
 - a. Select site for landing zone for one helicopter based on the following.
 - (1) Size and surface condition.
 - (2) Slope of ground.
 - (3) Ease of identification from air.
 - (4) Obstacles and obstructions in/around site.
 - (5) Enemy situation.
 - (6) Approach and retirement of helicopter.
 - (7) Defensibility.
 - b. Establish objective rally point.
 - c. Conduct leader's recon.
 - d. Secure the landing zone.
 - e. Ensure the site is free of obstacles.
 - f. Ensure slope does not exceed fourteen percent or eight degrees.
 - g. Determine approach and departure routes, and wind heading.
 - h. Respond to pilot initiated communications and give zone brief.
 - i. Utilize smoke, if necessary.
 - j. Demonstrate ITG, as necessary.
2. Establish a landing zone (night).
 - a. Execute steps a-f as listed above.
 - b. Mark the landing with either landing "T" or inverted "Y" with colored GE-1 markers.
 - c. Correctly place/utilize GAIL light.
 - d. Respond to pilot initiated communications and give zone brief.
 - e. Utilize strobe light, as necessary.
 - f. Demonstrate ITG with flashlights with IR covers or wands, as necessary.

REFERENCE(S):

1. MCI 03.32F, Reconnaissance Marine

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix A to
ENCLOSURE (6)

DUTY AREA 3 - COHMUNICATIONS

TASK: ANGL.3.1 OPERATE THE AN/PRC-77 RADIO SET

CONDITION(S): Provided AN/PRC-77, frequency, an assigned station on a radio net, callsign, batteries, and cleaning materials.

STANDARD: Install the AN/PRC-77, maintain reliable communications with other stations on the net, and ensure the radio is free of dirt, debris, rust and corrosion and fully operational with discrepancies noted for repair, per the references.

PERFORMANCE STEPS:

1. Set up the PRC 77.
 - a. Install batteries.
 - b. Attach antenna.
 - c. Attach handset.
 - d. Set frequency and volume controls.
 - e. Apply power.
 - f. Conduct operational check.
2. Operate the AN/PRC-77 radio.
 - a. Conduct an operational check.
 - b. Establish communications on the net.
 - c. Troubleshoot problems.
 - d. Perform operator level maintenance.
3. Perform preventive maintenance on the AN/PRC-77.
 - a. Conduct an SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 11-5820-498-12, Operator's Manual, AN/PRC-77
2. MCO P4790.2, MIMMS Field Procedures Manual
3. MCO P3000.11, MARES Intro Policy Manual
4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.2 OPERATE AN/GRA-39 RADIO SET CONTROL GROUP

CONDITION(S): Provided an AN/GRA-39 with batteries, WD-1/TT, designated radio equipment, and the reference.

STANDARD: Operate the AN/GRA-39, per the reference.

PERFORMANCE STEPS:

1. Install batteries.
2. Place local control unit next to radio.
3. Connect local control unit radio cable to audio connector of radio.
4. Place remote control unit at desired site.
5. Connect handset to remote control unit.
6. Connect two units together with a wireline.
7. Apply power to both units.
8. Conduct operational check.
9. Perform Operator Maintenance on the AN/GRA-39.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 11-5820-477-12, Operators Manual, AN/GRA-39
2. MCO P4790.2, MIMMS Field Procedures Manual
3. MCO P3000.11, MARES Intro Policy Manual
4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.3 OPERATE AN/PRC-104 RADIO SET

CONDITION(S): Provided AN/PRC-104, an assigned station, frequency, callsign, batteries, cleaning materials, and the references.

STANDARD: Install the AN/PRC-104, maintain reliable communications with other stations on the net, and ensure the equipment is free of dirt, debris, rust, corrosion, and fully operational, per the references. Report discrepancies, per the references.

PERFORMANCE STEPS:

1. Set up the AN/PRC-104.
 - a. Install batteries.

- b. Attach antenna to antenna base.
 - c. Attach antenna base to antenna socket.
 - d. Attach handset.
 - e. Set mode, antenna, frequency, and volume controls.
 - f. Apply power.
 - g. Tune the radio.
 - h. Conduct operational check.
2. Operate the AN/PRC-104 Radio Set.
- a. Ensure the radio is grounded.
 - b. Conduct an operational check.
 - c. Establish communications on the net.
 - d. Troubleshoot problems.
 - e. Perform operator level preventive maintenance.
3. Maintain the AN/PRC-104 Radio Set
- a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

- 1. TM 07748A-12/1, Operator’s Manual, AN/PRC-104
- 2. MCO P4790.2, MIMMS Field Procedures Manual
- 3. MCO P3000.11, MARES Intro Policy Manual
- 4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
- 5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.4 OPERATE AN/MRC-138 RADIO SET

CONDITION(S): Provided AN/MRC-138, an assigned station, frequency, call sign, batteries, cleaning equipment, and the references.

STANDARD: Install AN/MRC-138 maintain reliable communications with other stations on the net, and ensure the equipment is fully operational, free of dirt, debris, rust, and corrosion, per the references. Report all discrepancies, per the reference.

PERFORMANCE STEPS:

- 1. Set up the AN/MRC-138 Radio Set.

- a. Site the equipment.
 - b. Ground the radio set.
 - c. Connect cables.
 - d. Install AT-1011.
 - e. Connect handset.
 - f. Apply power.
 - g. Set frequency.
 - h. Conduct operational check.
2. Operate the AN/MRC-138 Radio Set.
 - a. Ensure the radio is grounded.
 - b. Conduct operational check.
 - c. Establish communications on the net.
 - d. Troubleshoot problems.
3. Perform operator level maintenance on the AN/MRC-138 Radio Set.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 07749A/07743A-12/1, Operator's Manual, AN/MRC-138
2. MCO P4790.2, MIMMS Field Procedures Manual
3. MCO P3000.11, MARES Intro Policy Manual
4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.5 OPERATE AN/MRC-110A RADIO SET

CONDITION(S): Provided AN/MRC-110A, frequency, call sign, a designated site, cleaning equipment and the references.

STANDARD: Install AN/MRC-110A, maintain reliable communications to include providing retransmission capabilities to other stations on the net, and ensure the radio set is fully operational, free of dirt, debris, rust, and corrosion, per the references. Report all discrepancies, per the references.

PERFORMANCE STEPS:

1. Set up the AN/MRC-110A Radio Set.

- a. Make sure the pins on the back of the radio are straight.
 - b. Lift the radio onto the mount and carefully push it straight back to seat the radio pins into the mount receptacle.
 - c. Check the dial light. If no light, return to first step and start again.
 - d. Tighten the mount clamps to lock the radio on the mount. If necessary, install safety wires to keep clamps from loosening.
 - e. Connect cable assemblies to the radio.
 - f. Erect AS-1729 antennae.
 - g. Ensure the radio is grounded.
 - h. Apply power.
 - i. Set frequency.
 - j. Allow 1 minute warmup time.
2. Operate the AN/MRC-110A Radio Set.
 - a. Ensure the radio is grounded.
 - b. Conduct operational check.
 - c. Establish communications on the net.
 - d. Conduct retransmission on the circuit.
 - e. Troubleshoot problems.
 - f. Perform operator level preventive maintenance.
3. Maintain the AN/MRC-110A Radio Set.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. MCO P4790.2, MIMMS Field Procedures Manual
2. MCO P3000.11, MARES Intro Policy Manual
3. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
4. TM 4700-15/1, Equipment Record Procedures
5. TM 11-5820-401-10-2, Operator's Manual, AN/MRC-110

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.6 OPERATE AN/MRC-145 RADIO SET

CONDITION(S): Provided an AN/MRC-119A, fill (contained in fill device), frequency, callsigns, batteries, an assigned net, cleaning equipment, and the references.

STANDARD: Install the AN/MRC-145 in a designated vehicle, maintain reliable communications with other stations on the net, and ensure the equipment is fully capable, free of dirt, debris, rust, or corrosion, and that discrepancies are noted for repair.

PERFORMANCE STEPS:

1. Set up the MRC-145.
 - a. Place the radio into the mount.
 - b. Connect cable.
 - c. Install antenna.
 - d. Apply power.
 - e. Load variable or enter frequency.
 - f. Conduct operational check.
 - g. If the radio setup includes two radios, repeat steps for the second radio.
2. Operate the MRC-145.
 - a. Conduct operational check.
 - b. Establish communications on the net.
 - c. Troubleshoot problems.
 - d. Perform operator level preventive maintenance.
3. Maintain the AN/MRC-145 Radio Set.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment record jacket.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 11-5820-890-10-1, Operator Manual, AN/MRC-145
2. MCO P4790.2, MIMMS Field Procedures Manual
3. MCO P3000.11, MARES Intro Policy Manual
4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS:

1. This task applies to the following radios:
 - a. AN/VRC-88A
 - b. AN/VRC-89A

- c. AN/VRC-90A
 - d. AN/VRC-91A
 - e. AN/VRC-92A
-

TASK: ANGL.3.7 OPERATE AN/PRC-113 RADIO SET

CONDITION(S): Provided an AN/PRC-113, an assigned station, frequency, callsign, batteries, cleaning materials, and the references.

STANDARD: Install the AN/PRC-113, maintain reliable communications with other stations on the net, and ensure the radio set is fully functional, free of dirt, debris, rust, and corrosion, per the references. Report discrepancies, per the references.

PERFORMANCE STEPS:

1. Set up the AN/PRC-113.
 - a. Install batteries.
 - b. Attach appropriate antenna.
 - c. Apply power.
 - d. Manually select frequency.
 - e. Load preset channels.
 - f. Select a preset channel.
 - g. Select low power.
 - h. Conduct operational check.
2. Operate the AN/PRC-113 Radio Set.
 - a. Conduct operational check.
 - b. Establish communications on the net.
 - c. Troubleshoot problems.
 - d. Perform operator level maintenance.
3. Maintain the AN/PRC-113 Radio Set.
 - a. Conduct an SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 31R2-2PRC113-1-1, Supplemental Operator's Manual, Radio Set, AN/PRC-113(V)2
2. MCO P4790.2, MIMMS Field Procedures Manual
3. MCO P3000.11, MARES Intro Policy Manual
4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94

5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.8 OPERATE AN/VRC-83 RADIO SET

CONDITION(S): Given an AN/VRC-83, an assigned station on a UHF radio net, frequency, callsign, cleaning gear, and the references.

STANDARD: Install AN/VRC-83, maintain reliable communications with other stations on the net, ensure the radio set is fully operational and free of dirt, debris, rust, and corrosion and that discrepancies are noted for repair, per the references.

PERFORMANCE STEPS:

1. Set up the AN/VRC-83.
 - a. Put the radio amplifier on the mount and fix into position.
 - b. Ensure the radio amplifier is switched off then connect the vehicle power supply to the back of the radio amplifier.
 - c. Mount the R/T on to the radio amplifier and fix into position.
 - d. Connect the RF cable from the ANT socket on the R/T to the RF IN on the radio amplifier.
 - e. Connect the antenna to the ANT socket on the radio amplifier.
 - f. Connect handset (H-250/U) to the R/T.
 - g. Ensure the radio is grounded.
 - h. Conduct operational checks.
2. Operate the AN/VRC-83 radio set.
 - a. Conduct operational check.
 - b. Establish communications on the net.
 - c. Troubleshoot problems.
 - d. Perform operator Level preventive maintenance.
3. Maintain the AN/VRC-83 Radio Set.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. MCO P4790.2, MIMMS Field Procedures Manual
2. MCO P3000.11, MARES Intro Policy Manual
3. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
4. TM 4700-15/1, Equipment Record Procedures

Appendix A to
ENCLOSURE (6)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.9 OPERATE AN/PSC-3 MANPACK SATELLITE TERMINAL

CONDITION(S): Provided an AN/PSC-3, batteries, frequencies, and callsign, cryptographic hardware and software, a compass, satellite location, and the reference.

STANDARD: Install the AN/PSC-3, per the reference.

PERFORMANCE STEPS:

1. Set up for line-of-sight (LOS) operation.
 - a. Install batteries.
 - b. Set up antenna (Azimuth and elevation).
 - c. Connect antenna to RT with proper cable.
 - d. Set frequencies.
 - e. Turn on power.
 - f. Conduct operational check.
2. Set up for satellite operation.
 - a. Install batteries.
 - b. Set up antenna (Azimuth and elevation).
 - c. Connect antenna to RT with proper cable.
 - d. Set frequencies.
 - e. Turn on power.
 - f. Conduct operational check.
3. Conduct operational check.
4. Establish communications on the net.
5. Troubleshoot problems.
6. Perform Operator level maintenance.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Update equipment requirements.
 - d. Report discrepancies.

REFERENCE(S):

1. TM 11-5895-1130-10/1, Operators Manual, AN/PSC-3 Satellite Communications Terminal
2. NTP-2, Section 1(B), Defense Satellite Communications System
3. Joint Publication 6-05.4
4. FMFM 3-30, Communications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.10 OPERATE AN/PRC-119A SINCGARS RADIO

CONDITION(S): Provided AN/PRC-119A, fill (contained in a fill device), an assigned station on a radio net, callsigns, batteries, cleaning equipment, and references.

STANDARD: Install the AN/PRC-119, maintain reliable communications with other stations on the net, and ensure the radio set remains fully operational, free of dirt, debris, rust, or corrosion, and that discrepancies are noted for repair.

PERFORMANCE STEPS:

1. Set up the AN/PRC-119 Radio Set.
 - a. Install the battery.
 - b. Install hold up battery (HUB).
 - c. Secure the battery case.
 - d. Connect antenna.
 - e. Connect handset.
 - f. Apply power.
 - g. Select proper position for all switches.
 - h. Load variable or enter frequency, as applicable.
2. Operate the AN/PRC-119 Radio Set.
 - a. Conduct operational check.
 - b. Establish communications on the net.
 - c. Troubleshoot problems.
 - d. Perform operator level maintenance.
3. Maintain the AN/PRC-119 radio set.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 11-5820-890-10-2, SINCGARS Operator's Manual
2. TM 5820-498-12, SINCGARS Operator Maintenance Manual
3. MCO P4790.2, MIMMS Field Procedures Manual
4. MCO P3000.11, MARES Intro Policy Manual
5. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
6. TM 4700-15/1, Equipment Record Procedures

Appendix A to
ENCLOSURE (6)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.11 OPERATE MX-9331B/URC REGENERATIVE REPEATER

CONDITION(S): Provided MX-9331B/URC, appropriate power source, cryptographic hardware and software, frequencies, callsigns, cleaning equipment, and references.

STANDARD: Install the MX-9331B/URC, maintain reliable retransmission capabilities for the other stations on the net, and ensure the equipment remains fully functional, free of dirt, debris, rust, corrosion, and that discrepancies are noted for repair.

PERFORMANCE STEPS:

1. Set up the MX-9331B/URC regenerative repeater.
 - a. Site the equipment.
 - b. Connect power.
 - c. Connect cables.
 - d. Apply power.
 - e. Load cryptographic software.
 - f. Conduct operational check.
 - g. Provide security.
2. Operate the MX-9331B/URC.
 - a. Conduct operational check.
 - b. Establish retransmission communications on the net.
 - c. Troubleshoot problems.
 - d. Perform operator level preventive maintenance.
3. Maintain the MX-9331B/URC.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 08848A-14/1, Operator's Manual, MX-9331B/URC
2. TM 11-5820-401-10-2, Operator's Manual, AN/MRC-110
3. MCO P4790.2, MIMMS Field Procedures Manual
4. MCO P3000.11, MARES Intro Policy Manual
5. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
6. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.12 OPERATE TSEC/KY-57 COMMUNICATION SECURITY EQUIPMENT

CONDITION(S): Provided a TSEC/KY-57 with batteries, cryptographic hardware and software, designated radio equipment, an assigned station on a radio net, frequencies, callsigns, cleaning equipment, and the references.

STANDARD: Install TSEC/KY-57, maintain reliable communications with other stations on the net via the TSEC/KY-57, and ensure the equipment is fully operational, free of dirt, debris, rust, corrosion, and that discrepancies are noted for repair.

PERFORMANCE STEPS:

1. Set up the TSEC/KY-57.
 - a. Install batteries.
 - b. Connect TSEC/KY-57 to designated radio equipment.
 - c. Apply power.
 - d. Conduct operational check.
 - e. Provide security.
2. Operate the TSEC/KY-57.
 - a. Conduct operational check.
 - b. Establish communications on the net.
 - c. Perform Seville Advanced Remote Keying operations, as required.
 - d. Troubleshoot problems.
 - e. Perform operator level preventive maintenance.
3. Maintain the TSEC/KY-57.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 11-5810-292-12, Communications Security, KYK-13, KYK-15, KOI-18
2. TM 11-5810-256-12, Operating Procedures for Communications Security Equipment
3. MCO P4790.2, MIMMS Field Procedures Manual
4. MCO P3000.11, MARES Intro Policy Manual
5. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
6. TM 4700-15/1, Equipment Record Procedures

Appendix A to
ENCLOSURE (6)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.13 OPERATE TSEC/KY-65 COMMUNICATION SECURITY SYSTEM, PARKHILL

CONDITION(S): Provided TSEC/KY-65 with batteries, cryptographic hardware and software, designated radio equipment, an assigned station on a radio net, frequency, callsign, cleaning equipment, and references.

STANDARD: Install the TSEC/KY-65, maintain reliable communications with other stations on the net via the TSEC/KY-65, and ensure that equipment remains fully operational, free of dirt, debris, rust, corrosion, and that discrepancies are noted for repair.

PERFORMANCE STEPS:

1. Set up the TSEC/KY-65.
 - a. Install batteries.
 - b. Connect TSEC/KY-65 to designated radio equipment.
 - c. Apply power.
 - d. Load cryptographic software.
 - e. Conduct operational check.
 - f. Provide security.
2. Operate the TSEC/KY-65.
 - a. Conduct operational check.
 - b. Establish communications on the net.
 - c. Troubleshoot problems.
 - d. Perform operator level preventive maintenance.
3. Maintain the TSEC/KY-65.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operational check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 11-5810-280-12 & P. Operator's Manual, TSEC/KY-65
2. MCO P4790.2, MIMMS Field Procedures Manual
3. MCO P3000.11, MARES Intro Policy Manual
4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.14 OPERATE TSEC/KYK-13 COMMUNICATIONS SECURITY EQUIPMENT

CONDITION(S): Given a TSEC/KYK-13, batteries, cryptographic fill, a transfer device, designated radio equipment, cleaning equipment, and references.

STANDARD: The Marine must connect the TSEC/KYK-13 to the designated radio equipment, ensure the equipment is working properly in the secure mode, and maintain the equipment reporting for all discrepancies for repair.

PERFORMANCE STEPS:

1. Operate the TSEC/KYK-13.
 - a. Insert batteries.
 - b. Connect to compatible radio equipment.
 - c. Load cryptographic fill.
 - d. Store cryptographic fill.
 - e. Transfer communications security variables.
2. Maintain the TSEC/KYK-13.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operations check.
 - d. Update equipment records.
 - e. Report discrepancies for repair.

REFERENCE(S):

1. TM 11-5810-256-OP-7, Operating Procedures for Communications Security Equipment
2. TM 11-5810-292-13, Communications Security Equipment, KYK-13, KYK-15, KO1-18
3. MCO P4790.2, MIMMS Field Procedures Manual
4. MCO P3000.11, MARES Intro Policy Manual
5. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.15 OPERATE TSEC/KO1-18 COMMUNICATIONS SECURITY EQUIPMENT

CONDITION(S): Given a TSEC/KO1-18, batteries, standard 8 level tape, compatible communications security equipment, cleaning equipment, and the references.

STANDARD: The Marine must connect the TSEC/KO1-18 to compatible communications security equipment and properly load the cryptographic code into designated radio equipment and perform preventive maintenance reporting discrepancies for repair.

PERFORMANCE STEPS:

1. Operate the TSEC/KO1-18.
 - a. Connect the equipment with a fill cable.

Appendix A to
ENCLOSURE (6)

- b. Insert the tape leader in the slot marked "IN", lining up feed holes with the white indicator dots on the device.
 - c. Press and release the appropriate button on the equipment being keyed, as required.
 - d. Pull the 8 level tape through the device at a steady rate.
 - e. Check to see if the equipment accepted the cryptographic fill. If not, repeat steps 1(a) through 1(d).
2. Maintain the TSEC/KOI-18.
 - a. Conduct SL-3 Inventory.
 - b. Conduct operations check.
 - c. Update equipment records.
 - d. Report all discrepancies for repair.

REFERENCE(S):

1. Vinson Keying Concept
2. TM 11-5810-256-OP-7, Operating Procedures for Communications Security Equipment
3. MCO P4790.2, MIMMS Field Procedures Manual
4. MCO P3000.11, MARES Intro Policy Manual
5. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
6. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.16 OPERATE TSEC/KYK-99 COMMUNICATIONS SECURITY EQUIPMENT

CONDITION(S): Given a TSEC/KY-99, batteries, cryptographic hardware and software, designated radio equipment, an assigned station on a radio net, frequencies, callsigns, cleaning equipment, and references.

STANDARD: Install the TSEC/KY-99, maintain reliable communications via KY-99, perform preventive maintenance and report discrepancies for repair.

PERFORMANCE STEPS:

1. Set up the TSEC/KY-99.
 - a. Install batteries.
 - b. Connect the TSEC/KY-99 to designated radio equipment.
 - c. Apply power.
 - d. Load cryptographic software.
 - e. Conduct operational check.
 - f. Provide security.
2. Operate TSEC/KY-99.
 - a. Conduct operational check.
 - b. Establish communications on the net.

- c. Troubleshoot problems.
- d. Perform preventive maintenance.
- 3. Maintain the TSEC/KY-99.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Update equipment records.
 - d. Conduct operational check.
 - e. Report discrepancies.

REFERENCE(S):

- 1. TM 09726A-13, Operator's Manual, KY-99
- 2. TM 11-5810-256-OP-7, Operating Procedures for Communications Security Equipment
- 3. MCO P4790.2, MIMMS Field Procedures Manual
- 4. MCO P3000.11, MARES Intro Policy Manual
- 5. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
- 6. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.17 OPERATE KL-43C COMMUNICATIONS SECURITY EQUIPMENT

CONDITION(S): Given a KL-43C batteries, an established key, a radio or telephone, an assigned station or line, frequency, callsigns, cleaning equipment, and references.

STANDARD: Install the KL-43C with designated radio or telephone equipment, maintain reliable communications with other stations on the net, and ensure the equipment is fully capable and free of dirt, debris, rust, and corrosion, and ensure discrepancies are noted for repair.

PERFORMANCE STEPS:

- 1. Set up the KL-43C.
 - a. Install batteries.
 - b. Connect KL-43C to the designated radio or telephone equipment.
 - c. Apply power.
 - d. Confirm power application by pressing the "Y" key.
 - e. Select a key.
 - f. Provide security.
- 2. Operate the KL-43C.
 - a. Establish communications on the net or line assigned.
 - b. Update keys as necessary.
 - c. Troubleshoot problems.

- d. Perform operator level preventive maintenance.
3. Maintain the KL-43C.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Update equipment records.
 - d. Conduct operational check.
 - e. Report discrepancies.

REFERENCE(S):

1. MCO P4790.2, MIMMS Field Procedures Manual
2. MCO P3000.11, MARES Intro Policy Manual
3. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
4. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.18 COMMUNICATE UTILIZING A TACTICAL ANTENNA (RC-292/OE-254)

CONDITION(S): Provided tactical antenna, designated site, and the reference.

STANDARD: Communicate utilizing the tactical antenna, per the references.

PERFORMANCE STEPS:

1. Erect the tactical antenna.
 - a. Select site.
 - b. Wear protective headgear and eye protection.
 - c. Select your site.
 - d. Raise mast with two men.
 - e. Adjust and tighten all guy ropes.
2. Operate with the tactical antenna.
 - a. Ensure antenna is properly grounded.
 - b. Connect antenna to radio.
 - c. Apply power to the radio set.
 - d. Establish communications on the assigned net.
 - e. Troubleshoot problems.
 - f. Perform operator level preventive maintenance.
3. Maintain the tactical antenna.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.

- c. Update equipment records.
- d. Conduct operational check.
- e. Report discrepancies.

REFERENCE(S):

- 1. Appropriate TM/Operators Manual
- 2. MCO P4790.2, MIMMS Field Procedures Manual
- 3. MCO P3000.11, MARES Intro Policy Manual
- 4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
- 5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS:

- 1. Ensure selected site is clear of obstructions such as power lines. If there are power lines near the site the antenna must not be any closer than twice the height of the antenna.

TASK: ANGL.3.19 ERECT OE-254

CONDITION(S): Provided an OE-254, designated site, and the references.

STANDARD: Erect the oE-254, per the reference.

PERFORMANCE STEPS:

- 1. Wear protective headgear and eye protection.
- 2. Select your site.
- 3. Connect antenna to radio.
- 4. Raise mast assembly without feedcone assembly.
- 5. Adjust and tighten all guylines.
- 6. Lower mast assembly to the ground.
- 7. Attach feedcone assembly.
- 8. Raise mast.

REFERENCE(S):

- 1. TM 11-5985-357-13, Operator's Manual, OE-254

ADMINISTRATIVE INSTRUCTIONS:

- 1. Ensure selected site is clear of obstructions such as power lines. If there are power lines near the site the antenna must not be closer than twice the height of the antenna.

Appendix A to
ENCLOSURE (6)

TASK: ANGL.3.20 OPERATE AS-2259/GR HF TACTICAL ANTENNA

CONDITION(S): Provided AS-2259/GR HF tactical antenna, a designated site, appropriate radio equipment, an assigned station, frequencies, callsigns, cleaning equipment, and the references.

STANDARD: Erect an AS-2259/GR HF tactical antenna, maintain reliable communications with other stations on the net, and ensure the antenna is fully operational and discrepancies are noted for repair.

PERFORMANCE STEPS:

1. Erect the AS-2259/GR antenna.
 - a. Select site.
 - b. Install the AB-1241 and connect to the radio set.
 - c. Assemble mast.
2. Operate with the AS 2259/GR antenna.
 - a. Ensure antenna is properly grounded.
 - b. Connect antenna to radio.
 - c. Apply power to the radio set.
 - d. Establish communications on the assigned net.
 - e. Troubleshoot problems.
 - f. Perform operator level preventive maintenance.
3. Maintain the AS-2259/GR antenna.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Update equipment records.
 - d. Conduct operational check.
 - e. Report discrepancies.

REFERENCE(S):

1. TM 07508A-14, Instruction Manual, AS-2259/GR HF Tactical Antenna
2. MCO P4790.2, MIMMS Field Procedures Manual
3. MCO P3000.11, MARES Intro Policy Manual
4. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
5. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS:

1. VEHICULAR INSTALLATION: The AS-2259/GR can be fitted to the MRC-138 by using the Adapter MX-9313/GR on the vehicle whip mount. When using this method leave off two sections to keep the top of the antenna at the correct height.
2. The antenna should be located in the center of a clear area. Installation of the antenna near any tall metal object or under heavy foliage should be avoided. Under no circumstances should structures come in contact with the antenna.

TASK: ANGL.3.21 CONSTRUCT LONG WIRE ANTENNA

CONDITION(S): Provided AB-()/GRC antenna mast kit, nylon rope, coaxial cable, 10 gauge wire, resistors, baton antenna, assigned type of antenna, appropriate radio equipment, an assigned net, frequencies, callsigns, cleaning equipment, and references.

STANDARD: Construct assigned long wire antenna to meet specifications using construction guidelines contained in the references, maintain reliable communications on the assigned net, and ensure the antenna is fully capable and that discrepancies are noted for repair.

PERFORMANCE STEPS:

1. Construct the long wire antenna.
 - a. Determine length of antenna.
 - b. Determine correct azimuth.
 - c. Select site large enough to accommodate antenna.
 - d. Construct the antenna.
 - e. Adhere to safety procedures.
 - f. Erect the antenna.
2. Establish communications with the long wire antenna.
 - a. Ensure the antenna is grounded.
 - b. Connect the antenna to the designated equipment.
 - c. Connect operations check.
 - d. Establish communications on the assigned net.
 - e. Troubleshoot problems.
 - f. Perform operator level preventive maintenance.
3. Maintain the long wire antenna.
 - a. Conduct SL-3 inventory.
 - b. Perform PM.
 - c. Conduct operations check.
 - d. Update equipment records.
 - e. Report discrepancies.

REFERENCE(S):

1. FM 24-18, Field Radio Procedures
2. FMFRP 3-34, Antenna Construction
3. MCO P4790.2, MIMMS Field Procedures Manual
4. MCO P3000.11, MARES Intro Policy Manual
5. MCBUL 3000 Series, MARES Logistics Reportable Equipment 94
6. TM 4700-15/1, Equipment Record Procedures

ADMINISTRATIVE INSTRUCTIONS:

1. This task applies to the following antennae:

Appendix A to
ENCLOSURE (6)

- a. Terminated/Nonterminated Long wire.
- b. Vertical half rhombic.
- c. Beverage.
- d. Dipole.
- e. Inverted L.
- f. Horizontal V.
- g. Sloping V.
- h. Ground plane.

TASK: ANGL.3.22 CAMOUFLAGE COMMUNICATIONS EQUIPMENT

CONDITION(S): Provided designated communication positions/equipment requiring camouflage, camouflage material, and the references.

STANDARD: Camouflage, per the references.

PERFORMANCE STEPS:

1. Plan camouflage to blend with the natural terrain.
2. Choose type of material to be used:
 - a. Radar scattering.
 - b. Radar transparent.
 - c. Seasonal materials.
3. Emplace the camouflage.
4. Inspect daily and repair deterioration.

REFERENCE(S):

1. FM 24-18, Field Radio Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.23 UTILIZE FIELD EXPEDIENT ANTENNA FOR HE AND VHF COMMUNICATIONS EQUIPMENT

CONDITION(S): Given an FM radio set, knife, suspension line, antenna or communications wire, callsigns, VHF or HF frequency, and a radio station within range.

STANDARD: The Marine must be able to communicate with the designated station, per the references.

PERFORMANCE STEPS:

1. Construct a vertical half rhombic field expedient antenna. (This antenna will radiate off both ends.)
 - a. Stretch 100 feet of wire on the ground. Ensure the antenna is pointed in the direction of the other radio station.
 - b. Lift center wire 30 feet into the air using a non-metallic object, such as wooden tent poles or a tree.

- c. Stake down the ends. If using metal stakes, connect an appropriate expedient insulator (such as a plastic spoon, button, etc.) between the wire and the stake.
 - d. Place a ground plain wire (counterpoise) on the ground. Connect this wire to any metal point, except the antenna post, of the radio.
 - e. Connect 4 foot piece of the wire to the antenna and to the radio antenna connector. Wrap around antenna base screw or cover screw and screw into the antenna connector.
2. Construct a dipole field expedient antenna. (This antenna will radiate off both sides.)
 - a. For a 30MHZ antenna.
 - (1) Connect both ends of a 31 foot piece of wire to an object. The wire must be suspended 15 feet high.
 - (2) Splice a wire from the radio to a spot 5-1/2 feet from one end of the antenna wire.
 - b. For a 45MHZ antenna.
 - (1) Connect both ends of a 21 foot piece of wire to an object. The wire must be suspended 11 feet high.
 - (2) Splice a wire from the radio to a spot 4 feet from one end of the antenna wire.
 - c. For a 60MHZ use roughly half the sizes and distances of the 30MHZ antenna.
 - d. For a 75MHZ antenna, use roughly half the sizes and distances of a 45MHZ antenna.
 - e. Select an appropriate expedient insulator. Connect each end of the wire to the insulator. In all cases both ends of the antenna must be insulated from end supports using appropriate expedient insulators.
 3. Construct a 3 foot field expedient whip antenna from locally available materials.
 - a. Cut a 3 foot section of communications wire.
 - b. Connect wire to antenna connector on radio.
 - c. Lash wooden stick or pole to radio.
 - d. Tie antenna wire to pole.
 4. Construct a 10 foot field expedient whip antenna from locally available materials.
 - a. Cut a 10 foot section of communications wire.
 - b. Connect one end of wire to antenna connector on radio.
 - c. Tie a rope or string to the other end of the wire.
 - d. Elevate the antenna wire by tying wire to a pole, tree, or tree limb.
 5. Transmit.

REFERENCE(S):

1. FM 24-18, Field Radio Procedures
2. TM 11-5820-667-12, Operator's and Organizational Maintenance Manual: Radio Set, AN/PRC-77 (Including Receiver-Transmitter, Radio RT-841/PRC-77)
3. FMFRP 3-34, Antenna Construction
4. ANGLICO Communications Handbook

ADMINISTRATIVE INSTRUCTIONS:

TASK: ANGL.3.24 DIRECT REMEDIAL ELECTRONIC COUNTER-COUNTERMEASURES (ECCM) PROCEDURES

CONDITION(S): Provided communications personnel and equipment, a tactical situation, a communication system, and enemy EW activity.

STANDARD: Direct remedial ECCM procedures to reduce effect of enemy EW, restore circuit performance, and deny the enemy knowledge of the effectiveness of the EW activity, per the references.

PERFORMANCE STEPS:

1. Recognize jamming/interference.
2. Report jamming/interference incidents.
3. Overcome jamming/interference.
4. Use an alternate means of communications.
5. Continue to operate.

REFERENCE(S):

1. FM 24-33, Communications Techniques for Electronic Counter-Countermeasures
2. FMFM 3-30, Communications
3. FM 24-18, Field Radio Procedures
4. OH 7-12, Enemy Electronic Warfare
5. ACP-125, Communications Instruction for Radio Telephone Procedures with US Supp 1&2

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.25 PERFORM TROUBLESHOOTING PROCEDURES ON A FAULTY RADIO

CONDITION(S): Provided a radio which fails to operate.

STANDARD: Determine whether the problem can be corrected locally or technical support must be requested.

PERFORMANCE STEPS:

1. Check the power source (battery or AC).
2. Check the frequency.
3. Check all switches for correct setting.
4. Check key setting (if operating secure).
5. Check all wire/cable connections.
6. Check antenna connection.
7. Inform supervisor of unresolved problem.

REFERENCE(S):

1. ANGLICO Communications Handbook

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.26 MAINTAIN CIRCUIT LOGS

CONDITION(S): Provided an assigned station on a radio net, blank circuit logs, and local SOP.

STANDARD: The circuit log show a complete and continuous record of all transmitted and received traffic and operating which occur during the day, including time of opening and closing of the station(s), causes of delays on the circuit, frequency adjustments and changes, and unusual occurrences such as procedure and security violations.

PERFORMANCE STEPS:

1. Print full name and grade upon opening a new circuit log, starting a new days log, or upon assuming the watch.
2. Time permitting, record all transmissions heard regardless of source or completeness.
3. During busy periods, make entries at frequent intervals to maintain receive of circuit status.
4. When receiving or relaying a message, enter only the message heading up to the first break (BT) in the log. Record entire message on a message blank.
5. Make changes by drawing a single line through the original entry and initialing the change. DO NOT ERASE!
6. Sign the log upon relief of the watch or upon closing the circuit.

REFERENCE(S):

1. ACP-125, Communications Instruction for Radio Telephone Procedures with US Supp 1&2
2. ACP-121, Communications Instructions, General, w/US Supp 1&2
3. ACP-124, Communications Instructions, General, w/US Supp 1&2
4. FM 24-18, Field Radio Procedures
5. FM 24-21, Tactical Multichannel Radio Communications and Techniques

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.27 PREPARE COMMUNICATIONS ASSETS FOR EMBARKATION

CONDITION(S): Provided operation order/plan, designated equipment, personnel, tools, embark material, embark plan, and references.

STANDARD: Embarkation to be carried out to meet the embark plan per the references and safety procedures.

PERFORMANCE STEPS:

1. Review unit SOP embarkation procedures.
2. Coordinate with unit embarkation personnel.
3. Ensure that embarkation boxes, pallets, and vehicles are marked.
4. Ensure that embarkation boxes/containers are waterproofed.
5. Ensure packing lists are prepared according to unit embarkation SOP.
6. Identify and package high security items and hazardous materials.
7. Ensure embarkation manifests and reports are updated and complete.

Appendix A to
ENCLOSURE (6)

- 8. Submit embark data to embark officer for review.
- 9. Ensure that embarkation boxes are secured and banded.
- 10. Ensure communications rolling stock is prepared for embarkation.
- 11. Ensure equipment is properly and securely loaded into vehicles.
- 12. Conduct safety and load inspection on all vehicles.
- 13. Stage equipment to be embarked.

REFERENCE(S):

- 1. MCO P4600.7C, USMC Transportation Manual
- 2. FMFM 4-6, Air Movement of FMF Units

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.28 OPERATE TSEC/KYK-15 COMMUNICATIONS SECURITY EQUIPMENT

CONDITION(S): Given a TSEC/KYK 15A connected to designated communications equipment, an assigned station on a radio net, frequency, callsigns, and references.

STANDARD: Send keymat material to other stations on the net via the TSEC/KYK-15A, per the references.

PERFORMANCE STEPS:

- 1. Perform VG operation.
- 2. Perform AK operation.
- 3. Perform MK net controller to subscriber operation.
- 4. Perform MK net controller to alternate net controller operation.
- 5. Perform operator level preventive maintenance.

REFERENCE(S):

- 1. TM 11-5810-292-34P, Communications Security Equipment
- 2. TM 11-5810-292-13, Communications Security Equipment, KYK-13, KYK-15, KOI-18
- 3. TM 11-5810-256-OP-7, Operating Procedures for Communications Security Equipment

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.29 UTILIZE CORRECT PROCEDURES TO ESTABLISH, ENTER, AND LEAVE A RADIO TELEPHONE NET

CONDITION(S): Given a tactical or nontactical environment, under all weather conditions, an NBC environment (if desired), FM radio set installed and operational, Communications/Electronics Operating Instruction (CEOI), distant operational station serving as the Net Control Station (NCS).

STANDARD: The Marine must establish communications, enter and leave a radio telephone net, per the references.

PERFORMANCE STEPS:

1. Establish a radio telephone net.
 - a. Extract appropriate call signs, suffixes, and frequency from the unit CEOI.
 - b. Prepare and operate the radio set.
 - c. Identify the net structure and determine the answering sequence.
2. Enter a radio telephone net.
 - a. Use abbreviated call signs except when directed by the NCS to use full call signs.
 - b. Authenticate when challenged by the NCS.
 - c. If you fail to answer a multiple or collective call sign in sequence, wait until all other stations on the net have answered, then answer.
3. Leave and close a net.
 - a. Request permission to leave the net from NCS.
 - b. Inform the NCS of the reason for leaving the net.
 - c. Authenticate upon direction of the NCS before leaving the net.

REFERENCE(S):

1. ACP-125, Communications Instruction for Radio Telephone Procedures with US Supp 1&2
2. CEOI, Communications-Electronic Operating Instructions
3. FM 24-1, Combat Communications
4. FM 24-18, Field Radio Procedures
5. ACP-121, Communications Instructions, General, w/US Supp 1&2
6. ACP-124, Communications Instructions, General, w/US Supp 1&2
7. FM 24-21, Tactical Multichannel Radio Communications and Techniques

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.30 UTILIZE NUMERICAL CIPHER AUTHENTICATION SYSTEM TO ENCODE, DECODE, AND AUTHENTICATE

CONDITION(S): Given a tactical or nontactical situation, under all weather conditions, a Nuclear/Biological/Chemical (NBC) environment (if desired), current Numerical Cipher/Authentication System, map coordinates to be encoded, encoded numerical information to be decoded, authentication challenge for reply, pencil and paper.

STANDARD: The Marine must use the numerical Cipher/Authentication System to encode and decode, and provide a correct reply for a challenge to authenticate, per the reference.

PERFORMANCE STEPS:

1. Find the line for encryption.
 - a. Randomly select any two letters for SET INDICATOR (SI).
 - b. Find the letter of the SI in the LINE INDICATOR column.
 - c. Find the second SI letter. Use the letter to the right of the SI letter as set letter for encryption.

- d. Find the SET LETTER in the LINE INDICATOR column. This line will be used to encrypt up to 15 characters.
- 2. Encrypt grid zone letters provided by the supervisor. NOTE: Grid zone letters will be included in messages when they are necessary to the understanding of such messages. NO OTHER LETTERS WILL BE ENCRYPTED. If necessary to preclude misunderstanding, a statement may be made that grid zone letters are included in the message.
- 3. Encrypt numbers provided by the supervisor.
- 4. Prepare for transmission.
- 5. Decrypt grid zone letters and numbers.
- 6. Perform challenge and reply authentication.
 - a. Challenge a station using authentication.
 - b. Reply to a station using authentication.
 - c. Perform transmission authentication.

REFERENCE(S):

- 1. Applicable Numerical Cipher/Authentication System

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.31 SEND MESSAGE USING NATO FORMAT

CONDITION(S): Given the information for a NATO format, a NATO message format, a radio set, a receiving station, callsigns, frequencies, and the references.

STANDARD: The Marine must correctly draft a NATO formatted message, establish communications and send a NATO message, per the references.

PERFORMANCE STEPS:

- 1. Draft a NATO message.
 - a. Evaluate information.
 - b. Place information in the proper lines of the NATO message.
- 2. Transmit a NATO message.
 - a. Establish communications with the receiving station.
 - b. Transmit the NATO formatted message.

REFERENCE(S):

- 1. ATP-38, Amphibious Operations
- 2. FMFM 0-3, Doctrinal Publications Guide

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.32 OPERATE TA-312 AND TA-1 FIELD TELEPHONES

CONDITION(S): Given a TA-1/PT or TA/312/PT telephone set, batteries, pliers or a knife, and a pre-installed field wire line.

STANDARD: The Marine must install the TA-312 or TA-1, send a message to the other end of the line and receive a ring back, per the references. He must also maintain the set to ensure its serviceability.

PERFORMANCE STEPS:

1. Install the batteries.
2. Select a site for the telephone set.
3. Connect the telephone to the line.
 - a. Strip one inch of insulation from the wires.
 - b. Secure the wire.
 - c. Insert wire into the binding posts.
4. Adjust the buzzer.
5. Make a call on the TA-1/PT.
 - a. Press the generator lever 4 to 5 times.
 - b. Ensure that the press-to-talk switch is not pressed.
 - c. Press the press-to-talk switch to talk, and release to listen.
6. Make a call on the TA-312/PT.
 - a. Ensure EXT-IN switch is in the INT position.
 - b. Ensure the handset is firmly seated.
 - c. Turn the hand crank rapidly several turns.
 - d. Remove the handset and wait for the called party to answer.
 - e. Press the press-to-talk switch to talk and release to listen.
7. Return the handset when terminating the call. If the call was through a switchboard, turn the handcrank to signal the switchboard operator.
8. Maintain the telephone set.
 - a. Ensure the set is complete and intact.
 - b. Ensure the net is properly installed.
 - c. Ensure that the case, panel, connector contacts, controls cord, and handset are clean and free of fungus or corrosion.
 - d. Inspect the battery compartment for cleanliness, and ensure that there is no foreign matter.
 - e. Check the condition of the batteries.
 - f. Ensure the handset is set firmly in retaining cradle and the retaining cradle springs maintain proper tension.
 - g. Inspect binding posts to ensure connections are tight.
 - h. Check the cord on the handset for cracks or breaks.
 - i. Ensure that all control knobs and switches operate properly without binding.
 - j. Initiate a call and check the operation of the telephone set.

REFERENCE(S):

- 1. STP 7-11B1-SM, Soldier’s Manual, Infantryman, SL 1
- 2. TM 11-5805-201-12, Operational Manual, TA-312/PT

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.33 OPERATE AN/PPN-19 TRANSPONDER SET (RADAR BEACON)

CONDITION(S): Given an AN/PPN-19 transponder set (radar beacon), a suitable location to set up, a frequency, a code, and an order to place the set into operation.

STANDARD: The Marine must emplace, activate, operate, and maintain the radar beacon set, per the reference.

PERFORMANCE STEPS:

- 1. Install batteries.
- 2. Emplace the beacon at the designated location.
- 3. Activate the beacon.
 - a. Enter your assigned code into the set and select mode of operation.
 - b. Report to the appropriate agency when the set is activated.
- 4. Change batteries, as required.
- 5. Troubleshoot the radar beacon, as required.
- 6. Provide operator maintenance, as required.

REFERENCE(S):

- 1. NWP 22-2/FMFM 1-7, Supporting Arms in Amphibious Operations
- 2. DEPIIM 115840-367-12, Operator’s Manual, AN/PPN-19

ADMINISTRATIVE INSTRUCTIONS:

- 1. If possible, ensure the correct frequency band is set in the beacon before leaving the ship.
-

TASK: ANGL.3.34 INITIATE OPERATOR’S MEACONING, INTRUSION, JAMMING, AND INTERFERENCE REPORTS (MIJI 1 AND 2)

CONDITION(S): Given a tactical or nontactical situation under all weather conditions an NBC environment (if desired), the requirement to operate in a radio net, an interfering signal of undesignated origin, homing loop antenna AT-784/PRC (if available), compass or terrain oriented map (if available), watch or other method of determining time, pencil and paper, Numeral Cipher/Authentication System, the references, MIJI 1 report format, and assistance.

STANDARD: The Marine must prepare an initial MIJI (MIJI 1) report, and send it to the net control station (NCS) by the best available means, per the references.

PERFORMANCE STEPS:

- 1. Prepare the MIJI 1 Report. NOTE: If the MIJI 1 report is submitted over nonsecure radio, items 1,2,3,4, and 6 must be encrypted using the Numerical Cipher/Authentication System.
- 2. Submit the MIJI 1 Report.

REFERENCE(S):

1. AR 105-3, Reporting Meaconing, Intrusion, Jamming, and Interference of Electromagnetic Systems
2. CEOI, Communications-Electronic Operating Instructions
3. FM 24-33, Communications Techniques for Electronic Counter-Countermeasures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.3.35 COMMUNICATE USING PROPER RADIO TELEPHONE PROCEDURES

CONDITION(S): Given an FM-VHF radio, an assigned net, a frequency, a callsign, message pad, pencil, a message format, and appropriate information pertaining to the types of report.

STANDARD: The Marine must write out the message using the correct format, call signs, and date/time group (DTG), and transmit the report to another station using proper communications procedures, per the references. The Marine will then receive a message, and correctly record and report the information.

PERFORMANCE STEPS:

1. Send the message.
 - a. Listen before transmitting.
 - b. Ensure message is clear and concise.
 - c. Use abbreviated call signs unless otherwise directed.
 - d. Speak clearly, slowly and enunciate each word. Do not key the handset continuously for more than 3-5 seconds. Break the message text into portions that are less than 3-5 seconds each transmitting the message using proper radio procedures.
 - (1) Use authentication.
 - (2) Use prowords.
 - (3) Use approved codes.
 - e. Assume the enemy is listening.
 - f. Notify higher headquarters by alternate means if jamming occurs by submitting a MIJI report.
2. Take immediate action if unable to establish communications.
3. Copy all incoming messages in message book properly.

REFERENCE(S):

1. FM 24-18, Field Radio Procedures
2. ACP-125(D), Radio Telephone Operator Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 4 - PREPARE FOR FIRE SUPPORT OPERATIONS

TASK: ANGL.4.1 DETERMINE LOCATION WITH THE AN/GVS-5 LASER RANGE FINDER

CONDITION(S): Given an AN/GVS-5 Laser Range Finder, a compass, a map of the area, plotting equipment, and two points identifiable on the ground and on the map.

STANDARD: The Marine must locate himself, with a six-digit grid, to within 100 meters of the actual location by plotting the back azimuth and distance from two points, per the references. The locations must agree within 100 meters.

PERFORMANCE STEPS:

1. Measure distance and azimuth to the first point.
2. Plot location from the back azimuth and distance.
3. Measure distance and azimuth to the second point.
4. Plot location from the back azimuth and distance.
5. Check the plot established from the second point and ensure it agrees within +/-100 meters of the plot from the first point using terrain association.
6. Read the grid from the map.

REFERENCE(S):

1. TM 11-5860-201-10, Operator's Manual: Laser Infrared Observation Set, AN/GVS-5
2. FM 21-26, Map Reading

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.2 DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO KNOWN POINTS

CONDITION(S): Given a complete AN/PAQ-3 MULE, two known points, communications with the Fire Direction Center (FDC), and a map of the area.

STANDARD: The Marine must locate himself, with an eight-digit grid to within 10 meters of the actual location and must transmit distance, azimuth and vertical angle to the FDC, within 5 minutes, per the references.

PERFORMANCE STEPS:

1. Ensure your position has an uninterrupted line of sight to the two known points that are both visible and on the map.
2. Set up the MULE.
3. Measure distance, azimuth, and vertical angle to the first known point.
4. Measure distance, azimuth, and vertical angle to the second known point.
5. Report this data to the FDC.
6. Record your location and direction to the known point as sent from the FDC.

REFERENCE(S):

1. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE

2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. Of the three procedures for determining location with the MULE, this is the most accurate and preferred method.

TASK: ANGL.4.3 DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING ONE KNOWN POINT AND A BURST

CONDITION(S): Given a complete AN/PAQ-3 MULE, one known point, one burst of a round, high explosive (HE) or white phosphorous (WP), communications with the FDC, and a map of the area.

STANDARD: The Marine must locate himself with an eight-digit grid to within 10 meters of the actual location. Distance, azimuth, and vertical angle must be transmitted to the FDC within 5 minutes of the burst, per the references.

PERFORMANCE STEPS:

1. Set up the MULE.
2. Measure distance, azimuth, and vertical angle to the first known point.
3. Measure distance, azimuth, and vertical angle to the graze burst.
4. Ensure the known point and graze burst are separated by at least 300 mils.
5. Report this data to the FDC.
6. Record your location and direction to the known point as sent from the FDC.

REFERENCE(S):

1. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. Location and reference azimuth accuracy are affected by the accuracy of the firing data. The FDC should use the most accurate data available.

TASK: ANGL.4.4 DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING TWO BURSTS

CONDITION(S): Given a complete AN/PAQ-3 MULE, two bursts (HE or WP), communications with the FDC, and a map of the area.

STANDARD: The Marine must locate himself, with an eight-digit grid to within 10 meters of the actual location. Distance, azimuth, and vertical angle must be transmitted to the FDC within 5 minutes of the second burst, per the references.

PERFORMANCE STEPS:

1. Set up the MULE.
2. Select the locations at which you want the rounds to impact.
3. Ensure the locations are separated by at least 300 mils.

4. Measure distance, azimuth, and vertical angle to each burst.
5. Report this data to the FDC.
6. Record the direction to the second burst.
7. Record your location and corrected azimuth to the second burst as sent from the FDC.
8. Determine the difference between the recorded azimuth and the reported azimuth from the FDC. The difference is positive if the reported azimuth is greater than the recorded azimuth, and negative if the reported azimuth is less than the recorded azimuth.
9. Apply the difference to the initial reference point azimuth.
10. Place the resulting azimuth on the MULE while sighting on the initial reference point.

REFERENCE(S):

1. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.5 DETERMINE LOCATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE) USING SELF-LOCATION PROCEDURE

CONDITION(S): Given a complete AN/PAQ-3 MULE, two prearranged points, and communications with the FDC.

STANDARD: The Marine must locate himself, with an eight-digit grid to within 10 meters of the actual location, using the MULE, per the references.

PERFORMANCE STEPS:

1. Set up the MULE.
2. Send the direction, distance, and vertical angle to two points.
3. Ensure the points are at least 300 mite apart.
4. Specify, to the FDC, which known point is on your left.
5. Obtain the orienting azimuth to one of the known points from the FDC.
6. Plot your location on the map and reorient the MULE on that point with the corrected azimuth.

REFERENCE(S):

1. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.6 DETERMINE LOCATION WITH THE SPECIAL OPERATION FORCES LASER MARKER (SOFLAM)

CONDITION(S): Given a Special Operations Forces Laser Marker (SOFLAM), a compass, a map of the area, plotting equipment, and two points identifiable on the ground and on a map.

STANDARD: The Marine must locate himself, with a six digit grid, to within 100 meters of the actual location by plotting the back azimuth and distance from two points, per the reference. The locations must agree to within 100 meters.

PERFORMANCE STEPS:

1. Measure the distance and azimuth to the first point.
2. Plot location from the back azimuth and distance.
3. Measure azimuth and distance to the second point.
4. Plot location from the back azimuth and distance.
5. Check the plot established from the second point and ensure it agrees to within +/-100 meters of the plot from the first point using terrain association.
6. Read the grid from the map.

REFERENCE(S):

1. TM 11-5820-203-12&P, Operator's and Organizational Maintenance Manual for Laser Marker, AN/PEQ-1 (SOFLAM)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.7 SELECT AN OBSERVATION POST AND PREPARE TO USE IT

CONDITION(S): Given a compass, binoculars, a map of the target area, communications equipment, an information sheet containing a situation overlay and a zone of observation.

STANDARD: The Marine must select and occupy an observation post (OP) without detection from the target area, per the references.

PERFORMANCE STEPS:

1. Perform map reconnaissance.
2. Perform physical reconnaissance.
3. Select an OP location which provides the best observation of the target area.
4. Take advantage of the terrain, existing cover, and concealment, while avoiding landmarks and prominent terrain features.
5. Use concealed access and exit routes to the position to occupy the OP without detection from the target area.
6. Occupy the OP.
7. Establish communications.
8. Report the OP location and field observation to the FDC.
9. Camouflage and cover the position.
10. Select an alternate OP.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.8 PREPARE AN OBSERVATION POST FOR USE WHILE MULE EQUIPPED

CONDITION(S): Given a map of the target area and an AN/PAQ-3 MULE with components, an information sheet containing a situation overlay and a zone of observation.

STANDARD: The Marine must prepare an OP using the MULE as his source of identifying targets, per the references.

PERFORMANCE STEPS:

1. Consider mutual support and coordination within the maneuver element if more than one laser designator is in use.
2. Ensure your position has an uninterrupted line of sight to the target area, provides cover and concealment, facilitates communications, and is near the expected avenues of approach and likely positions of high priority targets.
3. Set up and operationally check the MULE.
4. Determine position as accurately as possible, and keep the FDC informed of the location.

REFERENCE(S):

1. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE
2. FM 6-30, Observed Fire Procedures
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. The MULE will be treated as loaded weapon, never pointed at friendly personnel, and always pointed downrange.
-

TASK: ANGL.4.9 PLACE THE OBSERVED FIRE (OF) FAN ON A MAP

CONDITION(S): Given a map, an OF fan (GTA 6-7-3), a compass, binoculars, and a zone of observation.

STANDARD: The Marine must properly place the OF fan on his map, per the references.

PERFORMANCE STEPS:

1. Place the vertex of the fan over the observer's location.
2. Place the center radial over the center of the observer's sector of responsibility.
3. Ensure a radial line is parallel to a grid line.
4. Label the radial lines.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. GTA 6-7-3, OF Fan
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.10 DETERMINE DIRECTION TO TWO TARGETS

CONDITION(S): Given a map, an OF fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder, two targets, pencil, and paper.

STANDARD: The Marine must determine the direction, expressed to 10 mile, to two points within the target area within 1 minute to an accuracy of 50 mils, per the references.

PERFORMANCE STEPS:

1. Determine direction to the targets using the compass.
2. Express directions to the targets to the nearest 10 mils.
3. Complete steps 1 and 2 within 1 minute.
4. Use binoculars or an AN/GVS-5 or SOFLAM and determine direction to the targets by measuring from reference points.
5. Express directions to the targets to the nearest 10 mils.
6. Complete steps 4 and 5 within 1 minute.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.11 PREPARE A VISIBILI TO DIAGRAM

CONDITION(S): Given a map, your location, a compass, binoculars, a pad of paper, pencils, and an information sheet containing a zone of observation and responsibility.

STANDARD: The Marine must accurately prepare a visibility diagram graphically showing areas that are both visible and not visible from his location, using 100 mil radial lines, per the references.

PERFORMANCE STEPS:

1. Plot your location.
2. Draw lines of visibility 100 milts apart from your location out to the farthest limits of your zone of responsibility.
3. Label the lines with the correct direction.
4. Construct a profile along each line marking the points that are not visible.
5. Connect the points and shade the areas between these points graphically showing the areas that cannot be seen from your location.
6. Label the diagram and send it to the FSCC, as required.

REFERENCE(S):

1. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units

Appendix A to
ENCLOSURE (6)

- 2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.12 LOCATE A TARGET BY GRID COORDINATES

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, a coordinate scale, and a target.

STANDARD: The Marine must determine and announce the six-digit grid coordinate of the identified target within a 200-meter tolerance within 50 seconds.

PERFORMANCE STEPS:

- 1. Determine direction to target.
- 2. Find direction on OF fan and follow the radial out to the estimated distance to target.
- 3. Use terrain association to refine distance and determine grid.
- 4. Announce the grid coordinates.

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
- 3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.13 LOCATE A TARGET BY POLAR PLOT

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, a coordinate scale, and a target. Observer location must be known by the FDC.

STANDARD: The Marine must locate the target within 200 meters of the actual location within 50 seconds after identification. Express direction to the nearest 10 mils and within 50 mils of the actual direction. Express distance to the nearest 100 meters. Express target altitude to the nearest 5 meters.

PERFORMANCE STEPS:

- 1. Determine and announce the direction to the target.
- 2. Determine the distance to the target.
- 3. Determine the vertical shift (up or down) to the target. If it is less than 30 meters, ignore the vertical shift.

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
- 3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.14 LOCATE A TARGET BY SHIFT FROM A KNOWN POINT

CONDITION(S): Given a map, a compass, binoculars, a suspected target near a known point, pencil, and paper.

STANDARD: The Marine must locate the target to within 200 meters of the actual location and announce the target location within 50 seconds after identification. Express direction to the nearest 10 mite and within 50 mils of the actual direction. Express right or left corrections to the nearest 10 meters and range corrections to the nearest 100 meters. Express target altitude to the nearest 5 meters.

PERFORMANCE STEPS:

1. Determine the observer-target direction.
2. Use the mil relation formula to determine the lateral shift from the known point to the target.
3. Announce the lateral shift.
4. Determine and announce the range change from the known point to the target.
5. Determine and announce the vertical shift (up or down) from the known point to the target. Ignore the vertical shift if the difference is less than 30 meters.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.15 MEASURE ANGULAR DEVIATION WITH YOUR HAND

CONDITION(S): Given the need to make a lateral shift in the target area, a suspected target near a known point or reference point, and your hand.

STANDARD: The Marine must measure angular deviation with his hand to determine direction to a target from a reference point. Express direction to the nearest 10 mils and within 50 mils of the actual direction.

PERFORMANCE STEPS:

1. Face the target extending the arm fully, with the palm pointing toward the target area, whenever measuring angles.
2. Express the angles formed by the various hand and finger combinations (1, 2, 3, and 4 finger combinations, fist and hand combinations) to the nearest 10 mils.
3. Announce direction to the target.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.16 PREPARE THE DIGITAL COMMUNICATION TERMINAL (DCT) FOR OPERATION

CONDITION(S): Given a DCT, radios, encryption devices, DCT Job Aids, Marine Corps Fire Support System (MCFSS) Tab and MCFSS SOP.

STANDARD: The Marine must prepare the DCT for operation, per the references.

PERFORMANCE STEPS:

1. Power the DCT.
2. Set the DCT internal clock.
3. Load a DCT from another DCT.
4. Run the tactical fire (TACFIRE) observer program.
5. Set time.
6. Establish own name and address.
7. Set alarm and display parameters.
8. Set time of flight variable.
9. Set the conversion field in the DCT.

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. DCT Job Aids
3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.17 ESTABLISH COMMUNICATIONS PARAMETERS WITH THE DCT

CONDITION(S): Given a DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must enter all communication related data into the DCT, per the references.

PERFORMANCE STEPS:

1. Enter SET COMM data.
2. Enter subscriber data.
3. Enter default destination.
4. Enter FIST destination.
5. Enter serial numbers.
6. Assign authentication code files.
7. Perform a SET/RESYNC.
8. Transmit a digital message.
9. Receive a digital message.

10. Re-establish synchronization.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. DCT Job Aids
- 3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.18 REPORT OBSERVER LOCATION WITH THE DCT

CONDITION(S): Given an operational DCT, a map of the operational area, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must enter and report observer locations, per the references.

PERFORMANCE STEPS:

- 1. Enter grid location and altitude.
- 2. Enter laser related data.
 - a. Visibility.
 - b. GVLLD Code.
 - c. Cloud Height.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. DCT Job Aids
- 3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.19 DETERMINE OBSERVER LOCATION WITH THE DCT

CONDITION(S): Given an operational DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, MCFSS SOP, a map, an M2 compass, and two identifiable terrain features both visible and on the map.

STANDARD: The Marine must determine observer location by use of the three techniques available, per the references.

PERFORMANCE STEPS:

- 1. Determine location by trilateration.
- 2. Determine location by triangulation.
- 3. Determine location by resection.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP

- 2. DCT Job Aids
- 3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.20 PREPARE THE BATTLEFIELD COMPUTER TERMINAL (BCT)/LIGHTWEIGHT COMPUTER UNIT (LCU) SINGLE TERMINAL COMMAND POST (STEP) FOR OPERATIONS

CONDITION(S): Given an operational BCT/LCU, radios, encryption devices, BCT Job Aids and MCFSS SOP.

STANDARD: The Marine must prepare the STCP BCT/LCU node for operations, per the references.

PERFORMANCE STEPS:

- 1. Identify components of the BCT/LCU.
- 2. Cable the BCT/LCU.
- 3. Perform power up procedures.
- 4. Prepare the BCT.
- 5. Begin program load.
- 6. Set up peripheral devices.
- 7. Identify CURRENT and PLANNING BCT/LCU.
- 8. Set system date/time.
- 9. Restore a Salvage Point reading (SPR).
- 10. Record an SPR.
- 11. Perform power down procedures.

REFERENCE(S):

- 1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
- 2. MCFSS Version 9.57 SOP
- 3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS:

- 1. Ensure that all safety precautions are taken, per the applicable TM's.

TASK: ANGL.4.21 PREPARE BCT/LCU DUAL TERMINAL COMMAND POST (DTCP) FOR OPERATIONS

CONDITION(S): Given a DTCP BCT/LCU, radios, encryption devices, BCT Job Aids and MCFSS SOP.

STANDARD: The Marine must prepare the DTCP BCT/LCU node for operations, per the references.

PERFORMANCE STEPS:

- 1. Assign peripheral device status.
- 2. Clear print buffer.

3. Establish Artillery Target Intelligence mode of operations.
4. Establish target block and date/time.
5. Establish the Map Modification.
6. Initialize the Graphic Display Data.
7. Display all graphic data.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.22 ESTABLISH COMMUNICATION PARAMETERS WITH THE BCT/LCU

CONDITION(S): Given two BCT/LCU's, radios, encryption devices, BCT Job Aids, Task Organization Subscriber Table, and MCFSS SOP.

STANDARD: The Marine must input and establish all communication related data, per the references.

PERFORMANCE STEPS:

1. Establish net settings.
2. Establish subscriber data.
3. Establish multi-subscriber groups.
4. Establish default subscriber.
5. Establish legal messages.
6. Establish message of interest.
7. Change priority classification logging and display.
8. Establish station as a distant station in a RELAY scheme.
9. Establish DMD RELAY.
10. Re-establish synchronization between BCT's.
11. Re-establish synchronization with a BCS and DCT.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.23 VERIFY BCT/LCU SETUP CONFIGURATIONS

CONDITION(S): Given an operational BCT/LCU, radios, encryption devices, BCT Job Aids, and MCFSS SOP.

STANDARD: The Marine must verify that the BCT/LCU node is set up for operations, per the references.

PERFORMANCE STEPS:

1. Verify that all peripheral equipment is present.
2. Verify that all cables are properly connected for Single Terminal Command Post (STCP) configuration.
3. Verify that the proper power up procedures are performed.
4. Verify that the proper power down procedures are performed.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.24 VERIFY INITIALIZATION DATA WITH THE BCT/LCU

CONDITION(S): Given a Single Terminal Command Post (STCP) BCT or LCU, radios, encryption devices, BCT Job Aids, and MCFSS SOP.

STANDARD: The Marine must verify that the STCP node is initialized correctly, per the references.

PERFORMANCE STEPS:

1. Verify the correct input of a time hack, received by voice, into the computer.
2. Verify that the appropriate Artillery Target Intelligence Mode of operation is entered into the computer.
3. Verify the input of an assigned target block into the computer.
4. Verify the correct assignment of peripheral devices.
5. Verify the input of the Map Center.
6. Verify the restoration of a previously recorded Salvage Point Recording (SPR).

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.25 VERIFY THE INPUT OF THE COMMUNICATION RELATED MESSAGES WITH THE BCT/LCU

CONDITION(S): Given an operational BCT/LCU, radios, encryption devices, BCT Job Aids, Task Organization Subscriber Table, and MCFSS SOP.

STANDARD: The Marine must verify that all communication related data are correctly entered, per the references.

PERFORMANCE STEPS:

1. Ensure that all digital net parameters are entered correctly in the NET SETTING file.
2. Verify that all required subscriber data is entered in the SUBSCRIBER file.
3. Verify that all required messages are made legal in the LEGAL MESSAGE file.
4. Verify that modifications to the Priority Classification Logging and Display file are entered.
5. Verify the establishment of digital message device (DMD) relay setup.
6. Verify the establishment of computer as a distant station in a RELAY scheme.
7. Ensure the correct transmission of the AUTO resync message when maintaining digital synchronization within the BCT/LCU.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.26 POST INFORMATION ON FIRE SUPPORT SITUATION MAP IN THE FIRE SUPPORT COORDINATION CENTER (FSCC)

CONDITION(S): Given a mounted map covered with acetate, plotting equipment, and a list of current tactical information.

STANDARD: The Marine must plot and label all pertinent information on the fire support situation map, per the references.

PERFORMANCE STEPS:

1. Plot boundary, coordinating points, maneuver control points, and other maneuver control measures.
2. Plot locations of all friendly units including target acquisition assets.
3. Plot all coordination measures.
4. Plot all targets.
5. Plot enemy units.
6. Plot locations of subordinate units of a supported maneuver unit.

REFERENCE(S):

1. FM 101-5-1, Operational Terms and Symbols
2. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.27 PREPARE A FIRE SUPPORT CAPABILITY OVERLAY IN THE FSCC

CONDITION(S): Given a situation map, overlay material, plotting equipment, and the location and type of all supporting fires, to include mortars, field artillery, and Naval Surface Fire Support.

STANDARD: The Marine must prepare a fire support capability overlay that portrays the range capabilities of all the given fire support assets, per the references.

PERFORMANCE STEPS:

1. Attach a sheet of overlay paper to the situation map.
2. Write the marginal information on the overlay.
3. Plot and label the orienting grid register marks on the overlay.
4. Plot and label the location of all friendly artillery units.
5. Plot and label the range capability of all indirect fire weapons that can provide fire support in the maneuver zone.
6. Plot and label all fire support coordination measures.

REFERENCE(S):

1. FM 101-5-1, Operational Terms and Symbols
2. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.28 SUBMIT A LIST OF TARGETS

CONDITION(S): Given targets, complete target information, maps, target list worksheets, pencil, and commander's or platoon commander's guidance.

STANDARD: The Marine must prepare a list of targets on the Target List Worksheet (FS Form 134) and submit the list to the FSCC, per the references.

PERFORMANCE STEPS:

1. Identify and recommend target to the commander.
2. Assign authorized target numbers only.
3. Transfer the target information to the target list worksheet, properly completing all the information.
4. Annotate approval of the list of targets.
5. Submit the list of targets to the FSCC.

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.29 CONSOLIDATE/PROCESS FORWARD OBSERVER'S LISTS OF TARGETS

CONDITION(S): Given an FSCC with all equipment, commander's guidance, forward observer's lists of targets, blank target list worksheets, and a pencil.

STANDARD: The Marine must produce a consolidated target list, transmit and/or dispatch it to the correct fire support units and agencies, per the references.

PERFORMANCE STEPS:

1. Collect and record forward observers (FO's) lists of targets and the commander's target guidance.
2. Display the targets on an overlay.
3. Identify conflicts and duplications.
4. Identify targets that violate commander's guidance and fire support coordination measures.
5. Consolidate all lists of targets into a target list.
6. Ensure planned targets are consistent with the commander's guidance.
7. Submit the target list to the commander for approval.
8. Disseminate the target list to the appropriate units and agencies.

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FM 6-20-10, Targeting Process
4. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.30 PREPARE A TARGET BULLETIN (TARBUL)

CONDITION(S): Given a target list, target cancellations, a list of targets destroyed, target additions, targets damaged, reactivated targets, corrections to existing target, an FSCC with all equipment, and a blank TARBUL format.

STANDARD: The Marine must be able to prepare a TARBUL and pass it to the correct units and agencies, per the references.

PERFORMANCE STEPS:

1. Designate the first TARBUL as "Target Bulletin One".
2. Designate the last TARBUL as "Final Target Bulletin".
3. Annotate all additions, deletions, cancellations, changes, and updates.
4. Disseminate the TARBUL's accordingly.

REFERENCE(S):

1. FMFM 2-7, Fire Support in MAGTF Operations

2. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.31 ADVISE THE SUPPORTED UNIT OF FRIENDLY AND ENEMY FIRE SUPPORT CAPABILITIES AND LIMITATIONS

CONDITION(S): Given an operations order, the current intelligence summary, an updated situation map, and the fire support status chart.

STANDARD: The Marine must advise the supported unit commander of the general capability and limitations of fire support systems supporting and opposing him by stating their general capabilities, limitations, and characteristics, per the references.

PERFORMANCE STEPS:

1. State the general capabilities and limitations of mortars, field artillery, naval surface fire support, and close air support.
2. Determine the friendly fire support assets available to your supported unit.
3. Determine the enemy fire support assets threatening your supported unit.
4. Look up or state from memory the specific characteristics of two friendly weapon systems available.
5. Look up or state from memory the specific characteristics of two common enemy weapon systems threatening your supported unit.

REFERENCE(S):

1. FM 6-20, Fire Support in the Airland Battle
2. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
3. FM 6-20-50, Fire Support For Brigade Operations (Light)
4. FM 6-30, Observed Fire Procedures
5. FM 100-2-3, The Soviet Army Troops, Organization and Equipment
6. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.4.32 ADVISE THE MANEUVER COMMANDER ON FIRE SUPPORT COORDINATION MEASURES (FSCM)

CONDITION(S): Given a list of FSCM's a map covering the area to which the FSCM's apply, and plotting equipment.

STANDARD: The Marine must post the FSCM's received on the map, advise the maneuver commander of their meanings, and disseminate to higher/lower/adjacent units, per the references.

PERFORMANCE STEPS:

1. Draw FSCM's given.
2. Explain the meaning of all FSCM's and how they relate to the scheme of maneuver.
3. Disseminate FSCM's, as appropriate.

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6- 20 - 5 0, Fire Support For Brigade Operations (Light)
3. FMFM 2-7, Fire Support in MAGTF Operations
4. FM 6-20-30, Fire Support For Corps and Division
5. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

DUTY AREA 5 - CONDUCT FIRE SUPPORT OPERATIONS

TASK: ANGL.5.1 REQUEST AND ADJUST AREA FIRE

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with the FDC, pencil, and paper.

STANDARD: The Marine must engage a target by completing a call for fire within 60 seconds of target identification, announce subsequent corrections within 15 seconds of the burst (deviation to the nearest 10 meters, range to the nearest 100 meters, and height of burst (MOB) corrections to the nearest 5 meters), and enter fire for effect (FFE) within +/-50 meters of the target using no more than three adjusting rounds. Coordinates must be within 200 meters of the actual target location.

PERFORMANCE STEPS:

1. Transmit the complete call for fire, in the proper sequence.
2. Determine and transmit observer target (OT) direction with or before the first correction, when using the grid method of target location.
3. Transmit subsequent corrections in the proper sequence.
4. Request FFE.
5. Transmit refinement data (if any), Record as Target (if desired), END OF MISSION, and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. If the probable error in range is greater than or equal to 38 meters, the observer may call FFE when a 200 meter bracket is split.
2. When an FO is MULE equipped, one round adjust missions should be standard.

TASK: ANGL.5.2 OPERATE THE GCP-1 (GROUND COMMANDER'S POINTER), OR INFRARED (JR) LASER LONG RANGE POINTER (LPI-30)

CONDITION(S): Given a Ground Commander's Pointer (GCP-1) or an IR Laser Long Range Pointer, batteries, a ground target, a night observation device, and the references.

STANDARD: The Marine must properly illuminate targets with the laser pointer, and must maintain the pointer per the references.

PERFORMANCE STEPS:

1. Perform pre-operation checks.
 - a. Visually inspect all surfaces of the instrument. Inspect for dents, cracks, fractures, or other external physical damage.
 - b. Ensure that the output window is clean and dry.
 - c. Check interior of battery compartment for corrosion paying special attention to electrical contacts.
2. Operate the Laser Pointer.
 - a. GCP-1
 - (1) Install 9 volt battery observing proper polarity during installation.
 - (2) Put the arming switch into the "ARMED" position.
 - (3) Point the laser at the target and activate the "ON/OFF" switch by depressing the "ON/OFF" button located within the arming switch.
 - (4) Observe the laser beam and move it onto the designated target.
 - (5) Ensure the unit/aircraft supporting can see the beam by executing one of the following:
 - (a) "Snaking" the beam from your present position to the target.
 - (b) Illuminating the supporting aircraft and then "snaking" the beam to the target.
 - (6) Adjust the beam divergence, as necessary, to illuminate a larger portion of the target.
 - b. Operate the IR Long Range Laser Pointer (LPL-30).
 - (1) Install two "AA" size 1.5V alkaline cell batteries observing proper polarity during installation.
 - (2) Put your hand through the carrying strap and take hold of the LPI-30.
 - (3) Ensure the laser is pointed downrange towards the designated target and press the laser trigger.
 - (4) Observe the laser beam and move it onto the designated target.
 - (5) Ensure the unit/aircraft supporting can see the beam by executing one of the following methods:
 - (a) "Snaking" the beam from your present position to the target.
 - (b) Illuminating the supporting aircraft and then "snaking" the beam to the target.
 - c. Maintain the LPL-30 or GCP-1 Laser Pointer.
 - (1) Clean exposed glass surfaces with cleaning compound and lens cleaning tissue.
 - (2) Perform before-operation checks and services.
 - (3) Perform during-operation checks and services.
 - (4) Perform after-operation checks and services.

(5) Perform troubleshooting steps.

REFERENCE(S):

1. Operators Manual, Ground Commander's Pointer, NEVC Model GCP-1, Oct 92
2. Operators Manual, Long Range Laser Pointer, LPI-30, Version 11.92, Part Number 863900100

ADMINISTRATIVE INSTRUCTIONS:

1. The Laser Pointer will be treated as a loaded weapon, never pointed at friendly personnel, and always pointed downrange.
-

TASK: ANGL.5.3 OPERATE THE AN/GVS-5 LASER RANGE FINDER

CONDITION(S): Given an AN/GVS-5 laser range finder, a designated target, and the references.

STANDARD: The Marine must correctly measure and announce the distance to a target, per the references.

PERFORMANCE STEPS:

1. Operate the AN/GVS-5 Laser Range Finder.
 - a. Remove the lens cover.
 - b. Set the PWR switch to ON.
 - c. Aim the laser at the target.
 - d. Lase the target.
 - e. Announce the range.
 - f. Use the minimum range setting when appropriate.
 - g. Set the PWR switch to OFF.
 - h. Complete steps a. through g. in sequence.
2. Maintain the AN/GVS-5 Laser Range Finder.
 - a. Clean exposed glass surfaces with cleaning compound and lens cleaning tissue.
 - b. Perform before-operation checks and services.
 - c. Perform during-operation checks and services.
 - d. Perform after-operation checks and services.
 - e. Perform the three troubleshooting steps.

REFERENCE(S):

1. TM 11-5860-201-10, Operator's Manual: Laser Infrared Observation Set, AN/GVS-5
2. MCO P4790.2, MIMMS Field Procedures Manual

ADMINISTRATIVE INSTRUCTIONS:

1. Applicable laser safety guidelines must be adhered to prior to Easing the target.
-

TASK: ANGL.5.4 CONDUCT A FIRE MISSION WITH THE AN/GVS-5 LASER RANGE FINDER

CONDITION(S): Given an AN/GVS-5 laser range finder or SOFLAM, a compass, a map, a designated target, communications with the FDC, and TM 11-5860-201-10.

STANDARD: The Marine must correctly conduct a fire mission, and measure and announce the distance, to the nearest 10 meters, to a target with an AN/GVS-5 Laser Range Finder or SOFLAM, per the references.

PERFORMANCE STEPS:

1. Determine observer target direction.
2. Remove the lens cover.
3. Set the PWR switch at ON.
4. Aim the laser at the target.
5. Lase the target.
6. Express range to the target.
7. Use the minimum range setting when appropriate or when the multiple target warning light illuminates.
8. Transmit the call for fire using polar plot data.
9. Determine range to burst. Send appropriate deviation and range corrections.
10. Fire for effect.
11. Transmit refinement, end of mission (EOM), and surveillance.
12. Set the PWR switch at OFF.

REFERENCE(S):

1. TM 11-5860-201-10, Operator's Manual: Laser Infrared Observation Set, AN/GVS-5
2. TM 11-5860-203-12&P, Operator's and Organizational Maintenance Manual for Laser Marker, AN/PEQ-1 (SOFLAM)
3. FM 6-30, Observed Fire Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.5 OPERATE THE SPECIAL OPERATIONS FORCES LASER MARKER (SOFLAM)

CONDITION(S): Given an AN/PEQ-1 Laser Marker, a designated target, and the references.

STANDARD: The Marine must correctly measure and announce the distance to a target, per the references and perform preventive maintenance on the laser marker as outlined in the references without damaging the equipment.

PERFORMANCE STEPS:

1. Operate the laser marker.
 - a. Ensure SOFLAM has power applied.
 - b. Look into the eyepiece and hold the FIRST/LAST/TEST switch in the TEST position and observe that all of the indicators are illuminated. Return the switch to the FIRST position.
 - c. If reticula illumination is desired, depress and hold the RETICULE push button and observe that the reticula is illuminated red.

- d. Rotate the eyepiece diopter adjustment until the reticule and target are in sharp focus.
 - e. Position the SOFLAM until the center of the reticula is positioned over the center of the target area.
 - f. Position the operating controls as described in paragraph 4.3-1 with the OFF, RANGE, and MARK switch in the RANGE position.
 - g. Maintain the SOFLAM in a fixed position and depress and hold either the unit FIRE button or the remote FIRE button.
 - h. Observe the digital range display in the eyepiece for an indication of the distance in meters to the target.
 - i. If the green indicator is illuminated, the rangefinder has detected multiple targets and the range displayed is the range to the first target.
 - j. Release the FIRE button to clear the range display.
 - k. Set the FIRST/LAST/TEST switch to the LAST position and depress and hold the FIRE button to observe the range to the last target detected by the rangefinder.
 - l. Release the FIRE button to clear the range display.
 - m. Repeat steps g through l for additional targets.
2. Maintain the laser marker.
 - a. Inspect and maintain exterior surfaces.
 - (1) Inspect SOFLAM exterior for damage to housing, broken or missing knobs, damaged connectors and damaged or missing connector covers.
 - (2) Refer to higher level of maintenance, as required.
 - (3) Inspect for exterior cleanliness and unobstructed air flow over the heat exchanger cooling fins.
 - (4) Clean, as required.
 - b. Inspect and maintain Optical surfaces.
 - (1) Inspect all lens for dirt, fingerprints, chips, or cracks. Clean, as required.
 - (2) If chipped or cracked refer to a higher level of maintenance.
 - c. Inspect and maintain cables.
 - (1) Inspect cables for cuts, missing identification markers, damage to connectors, and bent or missing pins.
 - (2) Replace unserviceable cables.
 - d. Inspect and maintain field carrying case.
 - (1) Remove all items and shake out all loose dirt or foreign matter.
 - (2) Wipe inserts and interior of case with a clean, dry, lint-free cloth. If necessary, clean with a mild detergent and water to remove dirt and grease.

REFERENCE(S):

1. TM 11-5860-203-12&P, Operator's and Organizational Maintenance Manual for Laser Marker, AN/PEO-1 (SOFLAM)
2. MCO P4790.2, M I MMS F i eld Procedures Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix A to
ENCLOSURE (6)

TASK: ANGL.5.6 CONDUCT A FIRE MISSION USING THE SPECIAL OPERATIONS FORCES LASER MARKER (SOFLAM)

CONDITION(S): Given an AN/PEQ-1 Laser Marker, a compass, a map, a designated target, communications with the FDC, and the references.

STANDARD: The Marine must correctly conduct a fire mission, and measure and announce the distance, to the nearest 10 meters, to a target with an AN/PEQ-1 Laser Marker, per the references.

PERFORMANCE STEPS:

1. Request and adjust fire with non-precision guided munitions.
 - a. Determine observer target direction.
 - b. Remove the lens cover.
 - c. Ensure the SOFLAM has power applied.
 - d. Aim the laser at the target.
 - e. Lase the target.
 - f. Express range to the target.
 - g. Use the minimum range setting when appropriate or when the multiple target warning light illuminates.
 - h. Transmit call for fire using polar plot data.
 - i. Determine range to burst. Send appropriate deviation and range corrections.
 - j. Fire for effect.
 - k. Transmit refinement, EOM, and surveillance.
 - L. Execute normal shutdown procedure.
2. Mark for precision guided munitions.
 - a. Ensure the SOFLAM has power applied.
 - b. Set the code switches to indicate desired Band I or Band II code.
 - c. Perform steps d through l as listed above.

REFERENCE(S):

1. TM 11-5860-203-12&P, Operator's and Organizational Maintenance Manual for Laser Marker, AN/PEQ-1 (SOFLAM)
2. FM 6-30, Observed Fire Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.7 CONDUCT A FIRE MISSION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)

CONDITION(S): Given an AN/PAQ-3 with components, a map, a designated target and communications with the FDC.

STANDARD: The Marine must place the MULE into operation, obtain target information within 15 seconds after identifying the target, announce the range to within 10 meters, azimuth to within 2 mils, and the vertical angle within 5 mils of the actual target location.

PERFORMANCE STEPS:

1. Prepare the MULE for operation.
 - a. Set up and course level the system.
 - b. Connect the components.
 - c. Fine level the MULE.
 - d. Perform a pre-operations check on the MULE. Check for indications of low battery voltage, over-temperature condition, and low or no laser output by checking the malfunction indicator in the LRDM eyepiece.
 - e. Insert grid convergence values. Enter either the grid convergence angle or casting and northing coordinates. Entering coordinates is preferred.
 - f. Use direction determined to orient system.
2. Conduct a fire mission.
 - a. Assume a stable sitting or kneeling position.
 - b. Enter the proper pulse repetition frequency (PRF) code for laser guided munitions.
 - c. when the target appears, keep the viewing eye in the same relative position with respect to the eyepiece.
 - d. Determine if the line of sight is interfered with by obstructions which are likely to reflect the laser energy and generate false distances. Use the minimum range setting adjustment if this conditions exists.
 - e. Lase the center of the target. If Easing for munitions, Ease "high center" so as not to hit the road wheels or slope of the target.
 - f. Determine range, azimuth, and vertical angle to the target.
 - g. Transmit the call for fire.
 - h. Track moving targets by applying smooth horizontal and vertical corrections to the handle on the traversing unit.
 - i. Lase the target for the appropriate duration to provide terminal guidance for the munition, e.g., Ease for the last 13 seconds of the time of flight for the copperhead round.

REFERENCE(S):

1. TM 08579A-12/1, Operator and Organizational Maintenance Instruction for MULE
2. FM 21-26, Map Reading
3. FM 6-30, Observed Fire Procedures

ADMINISTRATIVE INSTRUCTIONS:

1. The MULE will be treated as loaded weapon, never pointed at friendly personnel, and always pointed downrange.
2. PMCS will be at an absolute minimum. The MULE will not require alignment, adjustment, calibration, or lubrication during normal hours. The MULE will be operated until a malfunction occurs at which time the appropriate maintenance will be initiated. The only preventive maintenance requirements are periodic servicing at the organizational level.

TASK: ANGL.5.8 CONDUCT A REGISTRATION WITH THE AN/PAQ-3 MODULAR UNIVERSAL LASER EQUIPMENT (MULE)

CONDITION(S): Given a MULE, communications with the FDC, a designated registration point, an AN/PSC-2 Digital Communications Terminal (DCT), (if so equipped), a map, and a call for fire from the FO initiating a registration.

STANDARD: The Marine must conduct a registration with a MULE without error.

PERFORMANCE STEPS:

1. Set up the MULE for operation.
2. Lase the bursts of the rounds.
3. Transmit the direction, distance, and viewer angle of the bursts to the FDC.
4. Ensure the fire does not cause injury to personnel or damage to equipment.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.9 CONDUCT A SUPPRESSION MISSION ON A PLANNED TARGET

CONDITION(S): Given planned targets (that are on the target list), the need to suppress one of those targets, and communications with the FDC.

STANDARD: The Marine must correctly transmit a call for fire (CFF) on an on-call target within 30 seconds of target identification.

PERFORMANCE STEPS:

1. Prepare and transmit the CFF.
2. Determine and transmit correction data if not within 200 meters.
3. Transmit refinement, EOM, and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.10 CONDUCT AN IMMEDIATE SUPPRESSION MISSION

CONDITION(S): Given a map an observed fire (OF) fan a compass, binoculars, an AN/GVS-5 Laser Range Finder AN/PEQ-1 SOFLAM (if so equipped), a coordinate scale, a target that needs to be immediately suppressed, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (if so equipped), pencil, and paper.

STANDARD: The Marine must correctly transmit a call for fire (CFF) to bring rapid fire on a target of opportunity within 30 seconds of target identification. Initial target location must be within 300 meters of the actual target location.

PERFORMANCE STEPS:

1. Locate the target.
2. Prepare and transmit the CFF.
3. If required, transmit subsequent corrections within 15 seconds of high explosive (HE) round impact. (Make bold, subsequent corrections to get rounds immediately on target.)
4. Transmit final refinement data, END OF MISSION, and the effects observed (after the desired effect is obtained).

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.11 CONDUCT A FIRE FOR EFFECT MISSION

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or SOFLAM laser marker (if so equipped), a coordinate scale, a target, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (if so equipped), pencil, and paper.

STANDARD: The Marine must locate a target within +/-50 meters of the actual location and transmit the call for fire (CFF) within 60 seconds of target identification.

PERFORMANCE STEPS:

1. Determine the target location.
2. Prepare and transmit the CFF.
3. Transmit refinement, EOM, and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.12 CONDUCT AN ILLUMINATION MISSION

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or AN/PEQ-1 Laser Marker (if so equipped), a coordinate scale, a target during darkness, communications with the FDC, a general direction to the target, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, and paper.

STANDARD: The Marine must adequately illuminate the target. The illumination call for fire (CFF) will be transmitted within 60 seconds of identifying a suspected target (2 minutes with the DCT).

PERFORMANCE STEPS:

1. Locate the target.
2. Transmit the complete illumination call for fire, in proper sequence.
3. Determine and transmit subsequent corrections.
4. Complete the mission.
5. Transmit appropriate refinement, EOM, and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. The increased tolerance in accurate target location is because of the condition of darkness.

TASK: ANGL.5.13 CONDUCT A COORDINATED ILLUMINATION MISSION

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or AN/PEQ-1 SOFLAM laser marker (if so equipped), a coordinate scale, a target during the hours of darkness, communications with the FDC, a general direction to the target, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, and paper.

STANDARD: The Marine must locate the target to within 250 meters of its actual location, provide maximum illumination coverage of the target area, and enter high explosive (HE) fire for effect (FFE) within +/-50 meters of the target location. The illumination call for fire will be transmitted within 60 seconds of identifying a suspected target (120 seconds with the DCT). The HE call for fire will be transmitted within 60 seconds after identifying the target (120 seconds with the DCT). Target location must be within 100 meters of the actual target location.

PERFORMANCE STEPS:

1. Transmit the complete illumination call for fire, in proper sequence.
2. Determine and transmit illumination corrections to include height of burst (HOB), if required.
3. Once the target is illuminated, determine location of target.
4. Transmit the coordinated illumination call for fire, in proper sequence.
5. Transmit "MARK" when the illumination round best lights the target.
6. Determine and transmit subsequent corrections within 15 seconds of HE round impact.
7. Fire for effect.

8. Transmit appropriate refinement, EOM, and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. The increased tolerance in accurate target location is because of the condition of darkness.

TASK: ANGL.5.14 CONDUCT A MISSION USING CREEPING FIRE PROCEDURES

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or an AN/PEQ-1 Laser Marker (if so equipped), a coordinate scale, a target, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, and paper.

STANDARD: The Marine must engage a target using creeping fire procedures, per the references.

PERFORMANCE STEPS:

1. Prepare and transmit the complete call for fire.
2. Determine subsequent corrections.
3. Transmit subsequent corrections within 15 seconds of the burst. The range correction brings the round closer to the target in increments that are known to be safe (corrections of 100 meters or less).
4. Determine and transmit refinement data, EOM, and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.15 CONDUCT A DANGER CLOSE FIRE MISSION

CONDITION(S): Given a compass, binoculars, map, a coordinate scale, communications with the FDC, a pencil and paper, and a target within 600 meters of friendly troops.

STANDARD: The Marine must conduct areafire using creeping procedures, per the reference.

PERFORMANCE STEPS:

1. Determine the aiming point 200-300 meters beyond actual target.
2. Prepare and submit the call for fire (CFF) within 60 seconds of target identification.
3. Determine and transmit subsequent corrections within 15 seconds of burst.

- 4. Request fire for effect (FFE).
- 5. Determine and transmit refinement data, EOM, and surveillance.

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.16 CONDUCT Two FIRE MISSIONS SIMULTANEOUSLY

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or AN/PEQ-1 Laser Marker (if so equipped), a coordinate scale, communications with the FDC, two targets to engage simultaneously, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, and paper.

STANDARD: The Marine must be able to conduct two fire missions simultaneously without confusion. Both calls for fire will be transmitted within 2 minutes of identification of the last target. Initial target locations will be within 200 meters of the actual location of the target. Fire for effect is within 50 meters of each target, and no more than three subsequent rounds are used in adjustment.

PERFORMANCE STEPS:

- 1. Determine target location.
- 2. Prepare and transmit both calls for fire, in the proper sequence.
- 3. Number the missions and precede corrections transmission with "TARGET NUMBER".
- 4. Complete missions using normal procedures.

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
- 3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.17 ADJUST FINAL PROTECTIVE FIRES

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or an AN/PEQ-1 Laser Marker (if so equipped), a coordinate scale, a tactical defensive situation, an adjusting point, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, and paper.

STANDARD: The Marine must adjust the final protective fires (FPF) to the exact location desired by the company commander, per the references.

PERFORMANCE STEPS:

- 1. Select an adjusting point located 400 to 600 meters from friendly troops.
- 2. Encode grid of selected adjusting point location.
- 3. Transmit the complete call for fire in the proper sequence announcing "Danger Close".

4. Begin adjustment with the flank piece whose round impacts closest to the FPF line.
5. Determine and transmit subsequent corrections.
6. Continue adjustment until round impacts within 50 meters of the desired location.
7. Transmit refinement data and instruct the FDC to begin firing the next piece.
8. When the last piece is adjusted, FPF is adjusted, EOM.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. If the FDC is battery computer system (BCS) equipped, only the center weapon is adjusted onto the center grid of the FPF and the adjustment terminated.
2. Manual gunnery requires that all guns be adjusted into the FPF.

TASK: ANGL.5.18 CONDUCT AN IMMEDIATE SMOKE MISSION

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or AN/PEQ-1 Laser Marker (if so equipped), a coordinate scale, a target (less than 150 meters in diameter) requiring an immediate smoke mission, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, and paper.

STANDARD: The Marine must totally obscure the target using white phosphorous (WP), or the improved smoke round (M825). Initial target location is within 300 meters of the actual target location. The call for fire is transmitted within 30 seconds of target location (60 seconds with the DCT).

PERFORMANCE STEPS:

1. Determine the placement point of immediate smoke.
2. Transmit the complete call for fire in the proper sequence.
3. Determine and subsequent corrections.
4. Spot initial rounds and determine and transmit deviation and range corrections to provide effective coverage. Minimum deviation and range corrections are 50 and 100 meters respectively.
5. Determine height-of-burst corrections, as necessary.
6. End mission when desired results are achieved.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. Firing standards will be directed by unit SOP.

TASK: ANGL.5.19 CONDUCT A QUICK SMOKE MISSION

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or SOFLAM (if so equipped), a coordinate scale, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, paper, an information sheet containing a target, a situation, the ammunition available, the wind speed, and the size and duration of the smoke screen.

STANDARD: The Marine must conduct a fire mission to deny enemy observation using WP, or the improved smoke round (M825). Initial target location is within 200 meters of the actual target location. The call for fire will be transmitted within 90 seconds of target identification, and subsequent corrections within 15 seconds of the previous burst.

PERFORMANCE STEPS:

1. Determine the size of the area to be obscured or screened.
2. Determine the wind direction in relation to the maneuver-target line.
3. Determine the projectile (WP, or M825) to be fired in effect.
4. Determine the best time of day to employ smoke.
5. Determine the adjusting point, it should be in the center of the area to be screened.
6. Prepare and transmit call for fire.
 - a. Announce observer identification.
 - b. Announce adjust fire.
 - c. Announce HE adjusting point location.
 - d. Transmit the target length.
 - e. Transmit the maneuver-target direction.
 - f. Transmit the wind direction:
Left cross, Head wind, Right cross, Tail wind
 - g. Transmit the duration time that the smoke is required.
 - h. Announce type of projectile.
 - i. Complete the call for fire.
7. If target is located by grid coordinates, transmit the OT direction before or with the first correction.
8. Switch to smoke when a 200-meter bracket is split and adjust one smoke round, when using HC; when using M825, once the 200 meter bracket is achieved, enter FFE.
9. Request fire for effect with smoke following adjustment of initial smoke round, if desired effects are achieved.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. If the M825 round is used, no HOB adjustment is necessary.

TASK: ANGL.5.20 CONDUCT A DESTRUCTION MISSION

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or SOFLAM (if so equipped), a coordinate scale, a target the commander desires destroyed, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, and paper.

STANDARD: The Marine must destroy the target.

PERFORMANCE STEPS:

1. Locate the target.
2. Transmit CFF ensuring "Destruction" is used as type of adjustment.
3. Continue to fire rounds at the target.
4. Make corrections as necessary (normally after every third round).
5. Fire until the target is destroyed.
6. Transmit EOM and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS:

1. Destruction puts a target out of action permanently. Exact percentages to define "destruction" vary and are determined by the commander based on the situation.

TASK: ANGL.5.21 CONDUCT A MISSION ON A MOVING TARGET

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or AN/PEQ-1 Laser Marker (if so equipped), a coordinate scale, a moving target, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (DCT) (if so equipped), pencil, and paper.

STANDARD: The Marine must engage a moving target using the special techniques required in this situation.

PERFORMANCE STEPS:

1. Identify a moving target.
2. Select an intercept point (IP) along the targets likely route of march as the target location.
3. Prepare and transmit a call for fire (CFF).
 - a. State the target is moving in your target description portion of the call for fire.
 - b. State at my command (AMC) in the "Method of Fire" portion of the call for fire.
4. Determine when to fire based on rate of speed of the target and time of flight (determine a trigger point).
5. Conduct the mission.

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures

ADMINISTRATIVE INSTRUCTIONS:

- 1. Adjust rounds to IP, if possible. This will improve first round accuracy and increase the damage to the target.

TASK: ANGL.5.22 SELECT AND LOCATE REGISTRATION POINTS

CONDITION(S): Given a compass, binoculars, a coordinate scale, an observed fire (OF) fan, a map of the target area, and a zone of observation.

STANDARD: The Marine must select and locate a suitable registration point, close to the center of the target area or zone of action, by an eight-digit grid within 30 meters of the actual location, and to the nearest 10 mils and within 50 ails of the actual direction to the target.

PERFORMANCE STEPS:

- 1. Select a registration point close to the center of the zone of action.
- 2. Determine and record the grid of the registration points.

REFERENCE(S):

- 1. FM 6-30, Observed Fire Procedures
- 2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.23 CONDUCT EMERGENCY OBSERVER PROCEDURES

CONDITION(S): Given an emergency situation in which the only firing battery that can support you has no FDC available and there are no other fire support means available to engage the target that must be engaged, a target, communications with the battery, a map, an observed fire (OF) fan, a compass, binoculars, a coordinate scale, pencil, and paper.

STANDARD: The Marine must engage a target by sending the fire commands directly to the battery.

PERFORMANCE STEPS:

- 1. Estimate the range from the battery to the target.
- 2. Determine the charge by use of the following rules:
 - a. 105 mm: Charge equals range in thousands plus 1.
 - b. 155 mm: Charge equals range in thousands.
- 3. Determine deflection to the target by converting the azimuth to the target into deflection. You must know the battery azimuth of lay.
- 4. Fire quadrant 240 mils.
- 5. Transmit the fire commands to the battery.
- 6. Make subsequent corrections with respect to the GT line as follows:
 - a. Determine 100/R. 100/R equals 100 divided by the range in thousands to the nearest hundred.

- b. Determine correction in deflection. Correction in deflection, in mils, equals the change in meters, divided by 100, times 100/R. (Change in meters divided by 100 X 100/R.)
 - c. Determine the number of mils change to quadrant that will give a 100-meter range change (C-factor). A change in QE is expressed in mile. Range change is expressed in hundreds of meters times the C-factor.
 - d. Determine the fuze setting by estimating the time of flight.
 - e. Adjust the height of burst using a C-factor of 2 divided by initial fuze setting for the change in HOB.
7. Enter fire for effect.
 8. Transmit refinement data, END OF MISSION, and observed effects.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.24 REQUEST FIRE ON IRREGULARLY SHAPED TARGETS

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or AN/PEQ-1 Laser Marker (if so equipped), a coordinate scale, an irregularly shaped target, communications with the FDC, an AN/PSC-2 Digital Communications Terminal (if so equipped), pencil, and paper.

STANDARD: The Marine must engage an irregularly shaped target, per the references.

PERFORMANCE STEPS:

1. Prepare and transmit complete call for fire, in proper sequence, within 60 seconds of target identification (120 seconds with DCT).
2. Locate the target center within +/-200 meters of actual location.
3. Transmit two grids or a center grid along with length and attitude to describe linear targets.
4. Transmit attitude to the nearest 100 mite and with 200 ails of the actual attitude. (Attitude is always less that 3200 mile.)
5. Transmit circular target location as a center grid and a radius.
6. Transmit three or more grids to locate a target when needed. For example to accurately portray a uniquely shaped target that is "L" shaped.
7. Determine and transmit subsequent corrections.
8. Adjust on target center using hasty or successive bracketing.
9. Send all subsequent corrections within 15 seconds of HE burst.
10. Transmit refinement data, END OF MISSION, and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.25 DIRECT A CLOSE AIR SUPPORT (CAS) STRIKE

CONDITION(S): Given an attack aircraft with ordnance, a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder, LPL-30 or AN/PEQ-1 Laser Marker (if so equipped), an AN/PAQ-3 MULE (if so required), a coordinate scale, a target, communications with the FSCC or direct air support center (DASC), an AN/PSC-2 Digital Communications Terminal (if so equipped), pencil, paper, a Joint Tactical Air Request (JTAR) form (DD Form 1972, APR 75), and an information sheet containing an aircraft callsign, mission number, type ordnance load, enemy situation, a friendly situation, attack restrictions, a radio frequency, and no forward air controller (FAC).

STANDARD: The Marine must direct a close air support (CAS) strike per FMFM 5-4A in correct sequence.

PERFORMANCE STEPS:

1. Consider the air threat situation.
2. Obtain the commander's approval before sending the CAS request.
3. Send immediate requests to the FSCC.
4. Transmit immediate CAS requests within 2 minutes of target identification.
5. Plan for and implement Suppression of Enemy Air Defenses (SEAD) as required based on the assessment of the air threat.
6. Transmit the 9 line brief to the pilot when the aircraft reaches the control point.
7. Transmit the time to target (TTT) to the pilot after the 9 line brief.
8. Mark the target using artillery, mortars, or NSFS. The mark should be within 300 meters of the target and 30 seconds before TTT.
9. Give the pilot final adjustment, in meters, from the marking round (reference point, to the target).
10. Ensure attack aircraft is lined up on proper target before "CLEARING HOT."
11. Adjust from previous aircraft hits to target giving reference to cardinal headings for follow-on aircraft.
12. Transmit effects of the strike to the aircraft, FSCC, or DASC, as appropriate.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 5-4, Offensive Air Support
3. FMFM 5-4A, Close Air Support and Close-In Fire Support
4. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.26 CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION USING ARTILLERY

CONDITION(S): Given the need to suppress enemy air defenses in the vicinity of the target area and on ingress and egress routes, a map, an observed fire (OF) fan, a compass, binoculars, an AN/PAQ-3 MULE or AN/PEQ-1 Laser Marker (if so equipped), an AN/GVS-5 Laser Range Finder (if so equipped), a coordinate scale, a target, communications with the battery and artillery liaison officer, access to the forward air controller (FAC), pencil, and paper.

STANDARD: The Marine must suppress enemy air defenses with artillery while coordinating with friendly air, and transmit the call for fire (CFF) in the correct sequence.

PERFORMANCE STEPS:

1. Identify SEAD targets and location to mark.
2. Transmit the CFF.
3. Direct the target to be marked.
4. Ensure the marking round impacts 30 seconds before the aircraft's bombs impact on the target.
5. Ensure the marking round is within 300 meters of the target.
6. Complete the mission.
7. Record the SEAD target, as required.

REFERENCE(S):

1. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
2. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.27 PROCESS AN AREA FIRE MISSION WITH THE DIGITAL COMPUTER TERMINAL (DCT)

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with the FDC via a DCT, DCT Job Aids, Marine Corps Fire Support System (MCFSS) Tab, MCFSS SOP, pencil, and paper.

STANDARD: The Marine must engage a target by transmitting a routine/basic call for fire within 120 seconds of target identification, subsequent corrections within 30 seconds of the burst, and enter fire for effect (FFE) within +/-50 meters of the target, in all three modes of approval, per the MCFSS SOP.

PERFORMANCE STEPS:

1. Input fire request grid.
2. Process the Message To Observer (MTO).
3. Receive related command messages.
4. Transmit subsequent corrections.
5. Transmit fire for effect (FFE).
6. Transmit refinement data (if any), Record as Target (if desired), End of Mission, and surveillance

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. DCT Job Aids
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
4. FM 6-30, Observed Fire Procedures
5. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
6. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.28 PROCESS SPECIAL FIRE MISSIONS WITH THE DCT

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with the FDC via a DCT, DCT Job Aids, MCFSS Tab, MCFSS SOP, pencil, and paper.

STANDARD: The Marine must initiate and process the following special fire missions in all three modes of fire mission approval, per the MCFSS SOP.

PERFORMANCE STEPS:

1. Process an FPF with and without adjustment.
2. Process a Priority Target/Known Point Assignment with and without adjustment.
3. Process a Time on Target (TOT) mission.
4. Process a Quick Smoke mission.
5. Process Illumination missions.
6. Process a Copperhead mission.
7. Fire the FPF/Priority/Known Point.

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. DCT Job Aids
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
4. FM 6-30, Observed Fire Procedures
5. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
6. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.29 CONDUCT A PRECISION REGISTRATION WITH THE DCT

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, a coordinate scale, a target, communications with the FDC via a DCT, DCT Job Aids, a MCFSS Tab, MCFSS SOP, pencil, paper and an call for fire from initiating precision registration.

STANDARD: The Marine must conduct a precision registration with the DCT, per the references.

PERFORMANCE STEPS:

1. Input the Precision Registration message.
2. Determine the OT factor.
3. Draw a diagram of impact of all rounds, recording the spottings to the nearest one milt
4. Split the 100-meter bracket by requesting ADD (DROP) 50.
5. Spot the next round. Split the 50-meter bracket by requesting 2 ROUNDS, ADD (DROP) 25, as appropriate, to obtain an opposite spotting.

6. Request ONE ROUND, ADD (DROP) 25, as appropriate, if these rounds are spotted opposite that of the previous spotting, to make the next round impact opposite the last 2 rounds.
7. Determine and announce the range and deviation refinement data to the nearest 10 meters.
8. Announce RECORD AS REGISTRATION POINT, TIME REPEAT, OVER.
9. Request 3 ROUNDS, REPEAT, once a measurable airburst is obtained.
10. Record the spotting of each round.
11. Determine the appropriate mean HOB correction of the 4 rounds to achieve a 20-meter HOB.
12. Transmit HOB refinement - HOB CORRECTION, RECORD AS TIME REGISTRATION POINT, END OF MISSION.

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. DCT Job Aids
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
4. FM 6-30, Observed Fire Procedures
5. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
6. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.30 CONDUCT A HIGH BURST (HB) OR MEAN-POINT-OF-IMPACT (MPI) REGISTRATION WITH THE DCT

CONDITION(S): Given a compass, communications with the FDC a Digital Communications Terminal (DCT), an aiming circle or a battery commander's scope, a surveyed OP and orienting data.

STANDARD: The Marine must conduct a high-burst or MPI registration with the DCT, per the references.

PERFORMANCE STEPS:

1. Input the HB/MPI Registration mission.
2. Set up instruments correctly.
3. Orient the instrument before the first round is fired, per the FDC's instructions.
4. Report to the FDC when ready to observe.
5. Measure and report the locations of the impacts and/or bursts.
6. Re-orient your instrument to the location of the first round only.
7. Continue spotting until FDC ends the mission.

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. DCT Job Aids
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
4. FM 6-30, Observed Fire Procedures

- MCO 1510.110
7 Apr 97
- 5. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
 - 6. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.31 REPORT ENEMY ACTIVITY BY USE OF THE AUTOMATED TERMINAL INDEX (ATI) MESSAGES WITH THE DCT

CONDITION(S): Given a DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must report enemy activity by use of the ATI;GRID, ATI;POLAR, and ATI;SHELREP reporting messages, per the references.

- PERFORMANCE STEPS:
- 1. Input and send an ATI;GRID message.
 - 2. Input and send an ATI;POLAR message.
 - 3. Input and send an ATI;SHELREP message.

- REFERENCE(S):
- 1. MCFSS Version 9.57 SOP
 - 2. DCT Job Aids
 - 3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.32 TRANSMIT A TARGET FOR INCLUSION IN A LIST OF TARGETS WITH THE DCT

CONDITION(S): Given a DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must transmit observer selected targets for inclusion into a list of targets by use of the PLAN message, per the references.

- PERFORMANCE STEPS:
- 1. Input the appropriate PLAN name into the PLAN message.
 - 2. Input the appropriate target number into the PLAN message.
 - 3. Transmit targets to the appropriate agency.

- REFERENCE(S):
- 1. MCFSS Version 9.57 SOP
 - 2. DCT Job Aids
 - 3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.33 REPORT THE FORWARD LINE OF TROOPS (FLOT) MESSAGE WITH THE DCT

CONDITION(S): Given a DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must report observer portion of the FLOT, per the references.

PERFORMANCE STEPS:

1. Input the assigned point numbers.
2. Input the FLOT points grid locations.
3. Transmit to the appropriate agency.

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. DCT Job Aids
3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.34 INPUT A TARGET IN THE KNOWN TARGET FILE WITH THE DCT

CONDITION(S): Given a DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must input a target into the known point file, per the references.

PERFORMANCE STEPS:

1. Input the Known Point number into the file.
2. Input the grid location into the file.

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. DCT Job Aids
3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.35 VERIFY DCT INITIALIZATION

CONDITION(S): Given an operational DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must verify that the DCT is properly initialized for operations, per the references.

PERFORMANCE STEPS:

1. Verify that all SETCOM parameters are entered correctly.
2. Verify the input of all INIT data.
3. Verify that the DCT is set up to operate as a Battalion FSOC.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. DCT Job Aids
- 3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.36 VERIFY DCT INPUT MESSAGES

CONDITION(S): Given an operational DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must verify that the DCT input messages are entered correctly, per the references.

PERFORMANCE STEPS:

- 1. Verify the correct entry of the FLOT message.
- 2. Verify the correct entry of the observer location (OBLOC) message.
- 3. Verify the correct entry of the ATI message.
- 4. Verify the correct entry of the FIREPLAN message.
- 5. Verify the correct entry of a target in the Known Fire Point file.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. DCT Job Aids
- 3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.37 SUPERVISE PROCESSING OF A FIRE REQUEST FROM A DCT EQUIPPED BATTALION FSCC

CONDITION(S): Given an operational DCT, radios, encryption devices, DCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must supervise the processing and clearance of fire missions per the three modes of fire mission approval, per the references.

PERFORMANCE STEPS:

- 1. Direct the DCT operator to make required adjustments to process fire requests with a DCT equipped battalion FSCC in the FSCC approval mode.
- 2. Supervise the processing of a FFE mission in the FSCC approval mode.
- 3. Direct the DCT operator to make required adjustments to process fire requests with a DCT equipped battalion FSCC in the CENTRALIZE mode.
- 4. Direct the processing of a FFE mission in the CENTRALIZE mode.
- 5. Direct the DCT operator to make required adjustments to process fire requests with a DCT equipped battalion FSCC in the AUTONOMOUS mode.
- 6. Direct the processing of a FFE mission in the AUTONOMOUS mode.

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. DCT Job Aids
3. TM 11-5895-1325-12, DCT Operations Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.38 INPUT DATA INTO THE SUPPORT PROGRAM OF THE BCT/LCU

CONDITION(S): Given a STCP BCT/LCU, radios, encryption devices, BCT Job Aids, and MCFSS SOP.

STANDARD: The Marine must input data in the support message file of the BCT/LCU, per the references.

PERFORMANCE STEPS:

1. Enter, edit, and delete the following Battlefield Geometry messages:
 - a. FLOT
 - b. CF FSCL
 - c. DSA
 - d. LFSZ
 - e. RFL
 - f. ACA
 - g. ZONE
2. Enter and retrieve data from the Survey Control Point File.
3. Transmit Radar Search Message to the Q-36.
4. Transmit Radar Zone Message to the Q-36.
5. Selectively remove geometry from the graphics display.
6. Change the line types used to display geometry on the graphics display.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.39 INPUT DATA INTO THE AMMUNITION AND FIRE UNIT INFORMATION FILE OF THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, a Single Terminal Command Post, radios, encryption devices, BCT Job Aids, and MCFSS SOP.

STANDARD: The Marine must input all related fire unit information into the BCT/LCU, per the references.

PERFORMANCE STEPS:

1. Enter a fire unit location.
2. Enter an initial fire unit ammunition message.
3. Establish critical ammunition level.
4. Establish controlled supply rate.
5. Store registration corrections.
6. Transmit AFU sums, data, and ALL data.
7. Print a fire unit SITREP.
8. Complete a Battalion AFU;SR.
9. Request AFU DATA from another BCT by the use of the AFU;COMD function.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.40 VERIFY ENTRIES MADE INTO THE SUPPORT PROGRAM OF THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, radios, encryption devices, BCT Job Aids, and MCFSS SOP.

STANDARD: The Marine must verify that the support messages and files are entered correctly, per the references.

PERFORMANCE STEPS:

1. Determine grid coordinate points from a 1:50,000 scale map to be entered as the following types of Battlefield Geometry:
 - a. NFA
 - b. FFA
 - c. ACA
 - d. CFL
 - e. SFZ
 - f. FLOT
2. Verify the naming and entry of all types of Battlefield Geometry into the computer.
3. Direct the automatic search and retrieval of SUPPORT data that might be present in another computer by the use of the Support Command XMIT TO ME function.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP

3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.41 VERIFY THE INPUT OF AMMUNITION AND FIRE UNIT INFORMATION IN THE BCT/LCU

CONDITION(S): Given two STCP BCT/LCU's, radios, encryption devices, BCT Job Aids and MCFSS SOP.

STANDARD: The Marine must verify that all related fire unit information is entered and updated correctly, per the references.

PERFORMANCE STEPS:

1. Verify all fields entered in the AFU;UPDATE message.
2. Verify all fields entered in the Battalion Ammunition Update message.
3. Verify the accuracy of data entered in the MISSION Fired Report message (AFU;MFR).
4. Direct the automatic search and retrieval of all fire unit ALL data that might be present in another computer by the use of the Ammunition Fire Unit Command XMIT TO ME function.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.42 INPUT COMMANDERS CRITERIA INFORMATION IN THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, BCT Job Aids, MCFSS Tab, MCFSS SOP, commander's guidance, and an operations order.

STANDARD: The Marine must input and update the Commander's Modification File information, per the references.

PERFORMANCE STEPS:

1. Establish and update the Commander's Modification file.
2. Establish fire unit selection and Battalion association.
3. Establish Max Volleys.
4. Exclude specific fire units from selection.
5. Establish volume of fire and desired effects on target.
6. Establish fore mission center files.
7. Delete an FM;CENTER file.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP

Appendix A to
ENCLOSURE (6)

3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.43 PROCESS A FIRE MISSION REQUEST WITH THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, DCT, BCS, FSCC (BCT/LCU), radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must input and process a fire request according to the three modes of fire mission approval, per the references.

PERFORMANCE STEPS:

1. Receive and process an adjust fire mission in the FSCC fire mission and approval mode.
2. Process subsequent corrections.
3. Record all fire mission data.
4. Recalculate a fire mission request.
5. Re-display fire commands out of the fire mission file.
6. Receive and process a fire for effect mission in the CENTRALIZE mode.
7. Receive and process a fire for effect mission in the AUTONOMOUS mode.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.44 PROCESS A SPECIAL FIRE MISSION REQUEST WITH THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, DCT, BCS, BN FSCC (BCT/LCU), radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must input and process special fire mission requests according to the three modes of fire mission approval, per the references.

PERFORMANCE STEPS:

1. Receive and process the following special missions in the FSCC approval mode.
 - a. FPF with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illunination missions.
 - f. Copperhead missions.

- g. Fire the FPF/Priority/Known Point.
 - h. Registration missions.
2. Receive and process the following special missions in the CENTRALIZED mode:
- a. FPF with or without adjustment.
 - b. Priority target/Known point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the FPF/Priority/Known Point.
 - h. Registration missions.
3. Receive and process the following special missions in the AUTONOMOUS mode:
- a. FPF with or without adjustment.
 - b. Priority target/Known point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination missions.
 - f. Copperhead missions.
 - g. Fire the FPF/Priority/Known Point.
 - h. Registration missions.

REFERENCE(S):

- 1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
- 2. MCFSS Version 9.57 SOP
- 3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.45 VERIFY THE INPUT OF COMMANDER'S CRITERIA INFORMATION IN THE BCT/LCU

CONDITION(S): Given a Dual Terminal Command Post (DTCP) BCT/LCU, BCT Job Aids, MCFSS Tab, MCFSS SOP, commander's guidance, and an operations order.

STANDARD: The Marine must verify the input and update of Commander's Modification File information, per the references.

PERFORMANCE STEPS:

- 1. Verify the input data into the Fire Mission Modification File (FM:MOD).
- 2. Direct the ordering of fire units into the Fire Unit Selection File (FM:FUSEL).
- 3. Direct the entry of Maximum Volley into the Fire Unit Selection File (FM:FUSEL).

Appendix A to
ENCLOSURE (6)

4. Direct the exclusion of a particular fire unit, faze, and/or shell from being considered by the use of the Fire Unit Exclusion File (FM:XCLUDE).
5. Verify the input and modification of Conn~ander's attack guidance into the Fire Mission Attack File (FM;ATTACK).
6. Direct the input of a Battalion FDC into the Center file (FM;CENTER) to include it's subordinate fire units.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.46 SUPERVISE THE PROCESSING OF A FIRE MISSION REQUEST WITH THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, DCT, BCS, BN FDC (BCT/LCU), radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must verify the input and processing of fire requests per the three modes of fire mission approval, per the references.

PERFORMANCE STEPS:

1. Supervise the processing of an adjust fire mission in the FSCC approval mode.
2. Supervise the processing of an adjust fire mission in the CENTRALIZE mode.
3. Supervise the processing of a fire mission in the AUTONOMOUS mode.
4. Direct the BCT operator to deny a fire request.
5. Direct the automatic search and retrieval of all observer location data that might be present in another computer by the use of the Fire Mission Command XMIT TO ME function.
6. Direct the recall of an active fire mission by use of the Fire Mission Command File.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.47 SUPERVISE THE PROCESSING OF SPECIAL FIRE MISSION REQUESTS WITH THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, DCT, BCS, BN FDC (BCT/LCU), radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must verify the input and processing of special fire mission requests per the three modes of fire mission approval, per the references.

PERFORMANCE STEPS:

1. Supervise the processing of the following special missions in the FSCC approval mode.
 - a. FPF with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination mission.
 - f. Copperhead mission.
 - g. Fire the FPF/Priority/Known Point.
 - h. Registration mission.
2. Supervise the processing of the following special missions in the CENTRALIZED mode.
 - a. FPF with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination mission.
 - f. Copperhead mission.
 - g. Fire the FPF/Priority/Known Point.
 - h. Registration mission.
3. Supervise the processing of the following special missions in the AUTONOMOUS mode.
 - a. FPF with or without adjustment.
 - b. Priority Target/Known Point Assignment with or without adjustment.
 - c. Time on Target (TOT) mission.
 - d. Quick smoke mission.
 - e. Illumination mission.
 - f. Copperhead mission.
 - g. Fire the FPF/Priority/Known Point.
 - h. Registration mission.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.48 PROCESS TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, A Single Terminal Command Post, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must input and retrieve ATI information, per the references.

PERFORMANCE STEPS:

1. Enter the following ATI reports.
 - a. Coordinate Report (ATI;CDR).
 - b. Shell Report (ATI;SHR).
 - c. Azimuth Report (ATI;AZR).
 - d. Surveillance Report (ATI;SVL).
 - e. Combat Target Intelligence (ATI;CBTI).
2. Perform the retrieval of targets from the target file that may meet more than any one (1) search criteria by the use of the ATI search message.
3. Perform the automatic search and retrieval of targets that meet one (1) or more search criteria from an ATI:
 - a. ATI:TRY.
 - b. ATI:COMB.
 - c. ATI:SPLIT.
4. Print ATI MODE 3 target file by the use of the ATI USER COMMAND message.
5. Print all Standing Requests for Information posted in the ATI MODE 3 computer by the use of the ATI USER COMMAND messages.
6. Transmit specific target criteria parameters to another ATI MODE 3 computer by use of the ATI:CRIT message.
7. Print the ATI MOD FILE, Range error and Location error tables.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.49 MODIFY THE ATI MODE 3 MODIFICATION FILE OF THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, a Single Terminal Command Post, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must input modifications to be made to the ATI MODE 3 program, per the references.

PERFORMANCE STEPS:

1. Input the following ATI modification file messages.
 - a. ATI;SVMOD.

- b. ATI;FMMOD.
 - c. ATI;TBMOD.
 - d. ATI;DPMOD.
 - e. ATI;STAT
2. Input data into the following ATI Command Target Report.
- a. ATI;TRY.
 - b. ATI;COMB.
 - c. ATI;SPLIT.
3. Print ATI MODE 3 target file by the use of the ATI USER COMMAND message.
4. Print all Standing Requests for Information posted in the ATI MODE 3 computer by use of the ATI USER COMMAND messages.
5. Transmit specific target criteria parameters to another ATI MODE 3 computer by use of the ATI;CRIT message.
6. Print the ATI MOD FILE, Range error and Location error tables.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. BCT Job Aids
- 3. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.50 SUPERVISE PROCESSING OF TARGETS FROM THE ARTILLERY TARGET INTELLIGENCE (ATI) FILE OF THE BCT/LCU

CONDITION(S): Given two STCP BCT/LCU's, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must verify the input and retrieval of ATI information, per the references.

PERFORMANCE STEPS:

- 1. Verify the following ATI reports:
 - a. Coordinate Report (ATI;CDR).
 - b. Shell Report (ATI;SHR).
 - c. Azimuth Report (ATI;AZR).
 - d. Surveillance Report (ATI;SVL).
 - e. Combat Target Intelligence (ATI;CBTI)
- 2. Direct the retrieval of targets from the target file that may meet more than any one (1) search criteria by the use of the ATI Search message.
- 3. Direct the automatic search and retrieval of targets that meet one (1) or more search criteria from an ATI MODE 3 computer by the use of the ATI;QUERRY XMIT TO ME message function.
- 4. Direct the posting of a Standing Request for Information to an ATI MODE 3 computer, for incoming targets that meet one (1) or more criteria.

Appendix A to
ENCLOSURE (6)

- 5. Direct the inclusion of targets from the target file that meet a specific search criteria into a Fire Plan List by the use of the ATI Prepare Fire plan message (ATI;PREFP).

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. BCT Job Aids
- 3. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.51 VERIFY THE MODIFICATION OF ATI MODE 3 RELATED MESSAGES WITH THE BCT/LCU

CONDITION(S): Given two STCP BCT/LCU's, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must verify the input of modifications to be made to the ATI MODE 3 program, per the references.

PERFORMANCE STEPS:

- 1. Verify the input of the following ATI Modification file messages.
 - a. ATI;SVMOD.
 - b. ATI;FMMOD.
 - c. ATI;TBMOD.
 - d. ATI;DPMOD.
 - e. ATI;STAT.
- 2. Verify the input of data into the following ATI Command Target Reports:
 - a. ATI;TRY.
 - b. ATI;COMB.
 - c. ATI;SPLIT.
- 3. Direct the printing of the ATI MODE 3 target file by the use of the ATI USER COMMAND message.
- 4. Direct printing of all Standing Requests for Information posted in the ATI MODE 3 computer by use of the ATI USER COMMAND messages.
- 5. Direct the transmission of specific target criteria parameters to another ATI MODE 3 computer by use of the ATI;CRIT message.
- 6. Direct the printing of the ATI MOD FILE, Range error and Location error tables.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. BCT Job Aids
- 3. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.52 COMPUTE A NON-NUCLEAR FIRE PLAN WITH THE BCT/LCU

CONDITION(S): Given a STCP BCT/LCU, a Single Terminal Command Post, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must input and compute a non-nuclear fire plan within twenty (20) minutes.

PERFORMANCE STEPS:

1. Build a fire plan (NNFP;COMD).
2. Name a fire plan and establish the Commander's Modification file (NNFP;COMD).
3. Make changes to the fire plan Modification file, as necessary (NNFP;COMD).
4. Establish fire unit selection and Battalion association of fire units (NNFP;FUSEL).
5. Establish Max Vol (NNFP;FUSEL).
6. Exclude specific fire units from selection (NNFP;XCLUDE).
7. Establish volume of fire and desired effects on target (NNFP;ATTACK).
8. Print the fire plan mod file for review (NNFP;COMD).
9. Add fire units and ammunition to the plan (NNFP;BUILD).
10. Add geometry to the plan (SPRT;BUILD).
11. Search target files for targets (ATI;SEARCH).
12. Include targets in the fire plan list (NNFP;FPLST) by use of the NNFP;FPTU and ATI;PREFP.
13. Instruct the movement of targets in the NNFP;FPLST by use of the NNFP;INSTR message.
14. Print the NNFP;FPTGT list (NNFP;COMD).
15. Compute the fire plan.
16. Transmit the targets in the schedule of fires (NNFP;TISF).
17. Review fire plan commands by use of the NNFP;EXECFP message.
18. Transmit fire commands.
19. Perform file maintenance.

REFERENCE(S):

1. MCFSS Version 9.57 SOP
2. BCT Job Aids
3. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.53 COMPUTE A FASCAM FIRE PLAN WITH THE BCT/LCU

CONDITION(S): Given an STCP BCT/LCU, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must input the Fire Plan database and compute a FASCAM fire plan, per the references.

PERFORMANCE STEPS:

1. Build a FASCAM plan (NNFP;COMD).

2. Name a FASCAM plan and establish the Commander's Modification File (NNFP;COMD).
3. Make changes to fire plan Modification File, as necessary (NNFP;COMD).
4. Establish fire unit selection and Battalion association of fire units (NNFP;FUSEL).
5. Establish max volume (NNFP;FUSEL).
6. Exclude specific fire units from selection (NNFP;XCLUDE).
7. Print the fire plan mod file for review (NNFP;COMD).
8. Add fire units and ammunition to the plan (NNFP;BUILD).
9. Add geometry to the plan (NNFP;BUILD).
10. Input minefield center and engagement parameters.
11. Reserve a fire unit (NNFP;RESFU).
12. Transmit the fire commands to the firing unit.
13. Perform file maintenance.

REFERENCE(S):

1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
2. MCFSS Version 9.57 SOP
3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.54 DIRECT THE BUILDING AND COMPUTATION OF A NON-NUCLEAR FIRE PLAN WITH THE BCT/LCU

CONDITION(S): Given two STCP BCT/LCU's, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must verify the input of the fire plan database and the computation of a non-nuclear fire plan within twenty (20) minutes.

PERFORMANCE STEPS:

1. Verify the building of a Fire Plan MOD file by use of the NNFP;COMD message.
2. Verify the building of a Fire Plan Tactical Database by the use of the Support and AFU Build message.
3. Verify the input of targets into the Fire Plan Preliminary Target List (NNFP;FPLST).
4. Verify the instruction and movement of targets from the FPLST to the Fire Plan Target List (NNFP;FPTGT) by the use of the NNFP;INSTR message.
5. Direct that a particular unit be reserved from firing for a period of the schedule by use of the NNFP;RESFU message.
6. Direct the computation of the Fire Plan by use of the NNFP;EXECFP.
7. Direct the execution of a Fire Plan once H-Hour is established by use of the NNFP;EXECFP.
8. Direct the generation of Fire Commands for review by use of the NNFP;EXEFCP.
9. Direct the transmission of the following Fire Plan target files:
 - a. NNFP;FPLST.

- b. NNFP;FPTGT
- c. NNFP;TISF.
- d. NNFP;FC.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. BCT Job Aids
- 3. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.55 DIRECT THE BUILDING AND COMPUTATION OF A FAMILY OF SCATTERABLE MINES (FASCAM) FIRE PLAN WITH THE BCT/LCU

CONDITION(S): Given a STCP BCT/LCU, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must verify the input of the Fire Plan database and the computation of a FASCAM fire plan, per the references.

PERFORMANCE STEPS:

- 1. Verify the building of a Fire Plan MOD file by use of the NNFP;COMD message.
- 2. Verify the building of a Fire Plan Tactical Database by use of the Support and AFU Build message.
- 3. Verify the input of FASCAM targets into the Fire Plan.
- 4. Direct the computation of the FASCAM Fire Plan by the use of the NNFP;FASCAM message.
- 5. Verify possible Fire Plan Exceptions.
- 6. Direct transmission of the Fire Commands to the firing unit.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. BCT Job Aids
- 3. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.56 DIRECT THE CONDUCT OF JUMP OPERATIONS WITH THE BCT/LCU

CONDITION(S): Given two STCP BCT/LCU's, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must supervise the preparation for movement and subsequent assumption of command of the alternate command post, per the references.

PERFORMANCE STEPS:

- 1. Verify that all required equipment is available for jump operations.
- 2. Direct the establishment of voice and digital communication with all required subscribers.

- 3. Assume control of the main, as required and directed.

REFERENCE(S):

- 1. MCFSS Version 9.57 SOP
- 2. BCT Job Aids
- 3. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.57 DIRECT THE PREPARATION AND MAINTENANCE OF THE MARINE CORPS FIRE SUPPORT SYSTEM (MCFSS) FILE MANAGEMENT SYSTEM WITH THE BCT/LCU

CONDITION(S): Given a STCP BCT/LCU, radios, encryption devices, BCT Job Aids, MCFSS Tab, and MCFSS SOP.

STANDARD: The Marine must supervise the organization and management of an automated Battalion or Regimental FSCC, per the references.

PERFORMANCE STEPS:

- 1. Direct the preparation of the following file folders:
 - a. COMM.
 - b. SUPPORT.
 - c. AFU.
 - d. FM.
 - e. ATI.
 - f. FIRE PLAN.
- 2. Direct the time cycle for the update of all base files based on the tactical situation.
- 3. Direct the management of Salvage Point Recordings (SPR).

REFERENCE(S):

- 1. TM 11-7025-279-10-1, Operator Procedure Guide, (LTACFIRE)
- 2. MCFSS Version 9.57 SOP
- 3. BCT Job Aids

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.58 CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION

CONDITION(S): Given a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a target, pencil, and paper.

STANDARD: The Marine must conduct either a grid, shift from a known point, or polar plot mission. He must identify the target within 200 meters of its actual location, determine altitude to within 10 meters of the actual altitude, transmit the initial call for fire (CFF) within 60 seconds of target identification, transmit subsequent corrections within 15 seconds of round impact, and initiate fire for effect (FFE) for

5-inch guns when a 100-meter bracket is split for a point target and a 200-meter bracket is split for an area target.

PERFORMANCE STEPS:

1. Determine target location.
2. Transmit the call for fire (CFF).
3. Make subsequent corrections.
4. Initiate FFE.
5. Transmit EOM and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
3. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
4. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.59 ADJUST NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a compass, binoculars, a map, communications with the FSCC, a supporting ship, an AN/PSC Digital Communications Terminal (DCT) (if so equipped), a coordinate scale, and an observed fire (OF) fan.

STANDARD: The Marine must engage a target with NSFS, per the references. The call for fire (CFF) is transmitted within 60 seconds of target identification and subsequent corrections within 15 seconds of round impact (25 seconds if the observer is moving).

PERFORMANCE STEPS:

1. Determine if the target is suitable for NSFS.
2. Determine target location within +/-200 meters of the actual target location.
3. Prepare and transmit the complete CFF.
4. Transmit subsequent corrections.
5. Engage target using Naval Surface Fire Support terms and techniques.
6. Initiate fire for effect when a 200 meter bracket is split, for an area target, and 100 meters for a point target.
7. Transmit EOM and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. MCO 3501.6B, Marine Corps Combat Readiness Evaluation System (Short Title: MCCRES); Volume V, Artillery Units
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
4. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.60 CONDUCT A HIGH ANGLE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder if so equipped), a coordinate scale, a target that needs to be engaged with high angle fire, communications with a direct support fire support ship, a pencil, and paper.

STANDARD: The Marine must recognize when high angle fire is required to engage a target, understand the limitations of some Naval guns to fire high angle missions, and conduct the mission without error.

PERFORMANCE STEPS:

1. Recognize targets that require high angle fire, e.g., those in defilade, et cetera.
2. Transmit the call for fire (CFF).
3. Announce "HIGH ANGLE" and "REDUCED CHARGE" in the Method of Engagement portion of the CFF.
4. Authenticate the challenge within twenty seconds of receipt.
5. Conduct the mission.
6. Transmit EOM and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
3. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS:

1. This task can be evaluated using the terrain board simulator.
-

TASK: ANGL.5.61 CONDUCT A SUPPRESSION OF ENEMY AIR DEFENSE (SEAD) FIRE MISSION USING NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given the need to suppress enemy air defenses in the vicinity of the target area and on ingress and egress routes, the enemy air defense (EAD) threat condition, commander's guidance, a map, an observed fire (OF) fan, a compass, binoculars, an AN/GVS-5 Laser Range Finder or AN/PEQ-1 Laser Marker (if so equipped), a coordinate scale, a target, communications with a fire support ship and the NSFS liaison officer, a fire support ship with the MK-86 GFCS and two operational gun mounts (if mission is both a mark and suppress), access to the forward air controller (FAC), a pencil, and paper.

STANDARD: The Marine must suppress enemy air defenses with NSFS while coordinating with friendly air, and transmit the call for fire (CFF) in the correct sequence.

PERFORMANCE STEPS:

1. Determine whether discontinuous SEAD or continuous SEAD will be used.
2. Identify SEAD targets and target to mark.
3. Transmit the CFF.
4. Process the mission.
5. Ensure the marking round impacts 30 seconds before the aircraft's bombs impact on the target.

6. Ensure the marking round is within 300 meters of the target.
7. Complete the mission.
8. Record SEAD target, as required.

REFERENCE(S):

1. CONSURFWARDEVGRU TACMEMO PD 3410-1-97, Suppression of Enemy Air Defenses (SEAD) Fire Missions Using Naval Gunfire Support
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
3. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.62 CONDUCT A DANGER CLOSE FIRE MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a compass, binoculars, a map, a coordinate scale, communications with a fire support ship, an observed fire (OF) fan, a pencil, paper, and a target within danger close distance of troops.

STANDARD: The Marine must fire NSFS on a target in the proximity of friendly forces using special procedures, per the references.

PERFORMANCE STEPS:

1. Recognize when a "DANGER CLOSE" situation exists.
2. Transmit the call for fire (CFF).
3. Announce "Danger Close" and "Reduced Charge" in method of engagement.
4. Authenticate the challenge within twenty seconds of receipt.
5. Conduct the mission.
6. Transmit EOM and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
3. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.63 CONDUCT A NAVAL SURFACE FIRE SUPPORT (NSFS) MISSION USING MEAN POINT OF IMPACT (MPI) ADJUSTMENTS

CONDITION(S): Given a compass, binoculars, a map, a coordinate scale, communications with the direct fire support ship and the FSCC, an observed fire (OF) fan, a pencil, paper, and a target.

STANDARD: The Marine must engage the target using MPI adjustment procedures.

PERFORMANCE STEPS:

1. Determine the target location.

2. Prepare and transmit the call for fire.
3. Request a method of engagement that identifies the MPI and allows for sixty percent of the rounds to impact on the target.
4. Authenticate the challenge within twenty seconds of receipt.
5. Enter fire for effect (FEE), when appropriate.
6. Report and adjust trends of salvos, as necessary, during FFE.
7. Complete the mission.
8. Transmit EOM and surveillance.

REFERENCE(S):

1. FM 6-30, Observed Fire Procedures
2. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
3. Naval Gunfire Spotter's Manual, Little Creek, VA, dtd 9/89
4. SW-300-BD-ORD-010, Vol 1, NAVSEA Technical Manual, Preparation, Analysis and Predicted Accuracy for Naval Gunnery

ADMINISTRATIVE INSTRUCTIONS:

1. This task can be evaluated using the terrain board simulator.
-

TASK: ANGL.5.64 RECORD A NAVAL SURFACE FIRE SUPPORT TARGET AS A TARGET

CONDITION(S): Given a compass, binoculars, a map, a direct fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a target, a pencil, and paper.

STANDARD: The Marine must record a target as a target during the conduct of a fire mission.

PERFORMANCE STEPS:

1. Identify the target.
2. Transmit the call for fire (CFF).
3. Authenticate the challenge within twenty seconds of receipt.
4. Conduct the mission.
5. Determine when a target should be recorded as a target.
 - a. Ensure the target is on identifiable terrain, both on the map and on the ground.
 - b. Ensure there is a good reason to suspect you will need to fire on or near the target again.
6. Announce "RECORD AS TARGET, TARGET NUMBER ", just prior to the end of the mission.
7. End the mission.

REFERENCE(S):

1. Naval Gunfire Spotteris Manual, Little Creek, VA, dtd 9/89
2. ATP-4(E), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS:

1. This task can be evaluated using the terrain board simulator.
-

TASK: ANGL.5.65 REFIRE A RECORDED TARGET WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a tactical scenario that requires fire on a recorded target, a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a target, pencil, and paper.

STANDARD: The Marine must correctly call for fire (CFF) on previously recorded target, per the references.

PERFORMANCE STEPS:

1. Identify the target and corresponding target number.
2. Transmit the abbreviated CFF.
 - a. Announce "FIRE MISSION, REFIRE TARGET NUMBER SO-AND-SO, DIRECTION SO-AND-SO", and any desired subelements of the target description if it has change, and method of control and engagement, if other than standard.
 - b. Send entire transmission as one, there is no break in transmission.
3. Complete the mission.
4. Transmit EOM and surveillance.

REFERENCE(S):

1. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
2. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS:

1. The task can be evaluated using the terrain board simulator.
-

TASK: ANGL.5.66 CONDUCT A NAVAL SURFACE FIRE SUPPORT MISSION USING TIME FUZES IN EFFECT

CONDITION(S): Given a target suitable to be engaged with an airburst fuze munitions, a compass, binoculars, a map, a direct support fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD: The Marine must engage a target using an airburst in effect without error.

PERFORMANCE STEPS:

1. Identify the target.
2. Transmit the call for fire (CFF). Announce "FUZE TIME, VT, or CVT IN EFFECT", in the method of engagement.
3. Authenticate the challenge within twenty seconds of receipt.
4. Make subsequent corrections and enter fuze time before firing for effect (FFE).
 - a. Adjust time to an optimum height of twenty meters. Proximity fuses do not require adjustment.
 - b. Make height of burst (MOB) correction to the nearest 5 meters.

- c. Correct GRAZE bursts with an UP 40.
- d. Correct GRAZE bursts after an air burst is obtained with an UP 20.
- 5. Enter FFE any time you estimate a correct HO8 can be obtained.
- 6. Fire for effect.
- 7. Complete the mission.
- 8. Transmit EOM and surveillance.

REFERENCE(S):

- 1. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
- 2. Naval Gunfire Spotter’s Manual, Little Creek, Va, dtd 9/89

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.67 CONDUCT AN ILLUMINATION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a target during darkness, a general direction to the target, a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD: The Marine must adequately illuminate the target and transmit the call for fire (CFF) within 60 seconds of identifying a suspected target.

PERFORMANCE STEPS:

- 1. Determine suspected location of the target.
- 2. Transmit the CFF specifying either "CONTINUOUS ILLUMINATION" or "COORDINATED ILLUMINATION" in the method of engagement.
- 3. Make illumination corrections.
- 4. Announce "RIPPED CHUTE" or "DARK STAR", if applicable.
- 5. Complete the mission.
- 6. Transmit EOM and surveillance.

REFERENCE(S):

- 1. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.68 CONDUCT A FRESH TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a tactical scenario where a target of higher priority presents itself during the conduct of a fire mission on another target, a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD: The Marine must conduct a fresh target shift mission, while conducting a fire mission on another target, per the references.

PERFORMANCE STEPS:

1. Detect when a fresh target shift mission should take place by recognizing that a higher priority target has presented itself.
2. Begin the new abbreviated call for fire (CFF), without ending the current mission, by announcing "FRESH TARGET" within 45 seconds.
3. Complete the mission.
4. Transmit EOM and surveillance on both targets.

REFERENCE(S):

1. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
2. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.69 CONDUCT A SIMULTANEOUS TARGET MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given two targets that require fire at the same time, a compass, binoculars, a map, a fire support ship with the MK-86 GFCS aboard and two operational gun mounts, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD: The Marine must conduct two fire missions simultaneously per the references.

PERFORMANCE STEPS:

1. Transmit the call for fire (CFF) on the first target within 2 minutes.
2. Transmit the second CFF when the mission is ready.
3. Preface all subsequent transmissions with the last two digits of the target number to which the transmission applies.
4. Complete both missions.
5. Transmit EOM and surveillance on both targets as each mission ends.

REFERENCE(S):

1. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
2. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.70 CONDUCT A NEW TARGET SHIFT MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a situation where a Marine is conducting a fire mission and a new target is identified that requires simultaneous fire, a compass, binoculars, a map, a fire support ship with the MK-86 GFCS aboard and two operational gun mounts, communications with the ship, a coordinate scale, an observed fire (OF) fan, a pencil, and paper.

STANDARD: The Marine must conduct a new target shift mission, firing on two targets simultaneously, per the references.

PERFORMANCE STEPS:

1. Transmit the call for fire (CFF) on the first target.
2. Initiate the CFF on the second target using fresh target shift procedures within 45 seconds.
3. Substitute the words "NEW TARGET" for "FRESH TARGET".
4. Follow simultaneous target mission procedures.
5. Complete both missions.
6. Transmit EOM and surveillance on both targets as each mission ends.

REFERENCE(S):

1. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
2. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.71 CONDUCT A DESTRUCTION MISSION WITH NAVAL SURFACE FIRE SUPPORT (NSFS)

CONDITION(S): Given a compass, binoculars, a map, a fire support ship, communications with the ship, a coordinate scale, an observed fire (OF) fan, a target the commander desires destroyed, a pencil, and paper.

STANDARD: The Marine must destroy the target.

PERFORMANCE STEPS:

1. Identify the target.
2. Transmit the call for fire (CFF) within 60 seconds.
3. Continue to fire until the target is destroyed, making subsequent corrections after entering fire for effect.
4. Complete the mission.
5. Transmit EOM and surveillance.

REFERENCE(S):

1. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
2. ATP-4(D), Allied Spotting Procedures for NGF Support

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.72 MAINTAIN INFORMATION ON FIRE SUPPORT STATUS CHART

CONDITION(S): Given a fire support status chart, plotting equipment, an operation order with a fire support appendix (Appendix 12), and a CEOI.

STANDARD: The Marine must display all nongraphical information indicating the current status of fire support asset responsive to the supported unit commander, per the references.

PERFORMANCE STEPS:

1. Post pertinent information required by the CO/FSC, as necessary.

- a. Designations, locations, missions, call signs, and radio frequency of all support assets responsive to the maneuver unit.
 - b. Ammunition availability in relation to the announced controlled supply rate.
 - c. Final protective fires allocated through maneuver channels.
 - d. Special weapons allocations.
 - e. Target engaged over a period of time.
 - f. Change in counterfire status.
 - g. Restrictions on engagement of certain types of targets.
2. Update all information, as required, and whenever possible.
 3. Monitor changes in the tactical situation and modify the fire support status chart, as necessary to display pertinent information.

REFERENCE(S):

1. FM 101-5-1, Operational Terms and Symbols
2. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS:

1. Information displayed/required on a fire support status chart will vary depending on the desires of the CO/FSC, the organization and its assets, and the tactical situation.

TASK: ANGL.5.73 PROCESS A PREPLANNED CLOSE AIR SUPPORT (CAS) REQUEST

CONDITION(S): Given a Joint Tactical Air Strike Request (JTAR) for a preplanned mission 72 hours in advance, a fully operational FSCC, commander's guidance, and a higher echelon FSCC.

STANDARD: The Marine must review the JTAR for completeness and correctness and process it expeditiously to the higher FSCC, per the references.

PERFORMANCE STEPS:

1. Review the JTAR for accuracy and completeness.
2. Make liaison with the Air Officer, if possible.
3. Gain the FSC's approval prior to processing the JTAR.
4. Forward the JTAR to the higher FSCC.

REFERENCE(S):

1. FMFM 5-4, Offensive Air Support
2. FMFM 5-4A, Close Air Support and Close-In Fire Support
3. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.74 DEVELOP AND EXECUTE A QUICK FIRE SUPPORT PLAN

CONDITION(S): Given a tactical situation where time limits preclude formal fire planning, communications with the FDC and FSCC, the commander's guidance, DA Form 5368-R (Quick Fire Plan), priority of fires, a minimum of five targets, knowledge of available fire support assets, order and timing of target engagement, duration of fires, H-hour, and a pencil.

STANDARD: The Marine must develop and transmit a quick fire support plan within 20 minutes, per the references.

PERFORMANCE STEPS:

1. Obtain the commander's guidance.
2. Complete DA Form 5368-R heading.
3. Issue situation report and warning order to the appropriate FSCC's and firing units.
4. Collect information on the availability and status of mortars, field artillery, NSFS, and close air support to support the mission.
5. Select targets.
6. Obtain the commander's approval of the targets.
7. Complete and transmit the target list portion of DA Form 5368-R.
8. Schedule targets on DA Form 5368-R, per the commander's guidance.
9. Transmit the schedules to the firing units.
10. Brief the observers.
11. Report to the commander when the firing units are ready.
12. Amend the plan, as necessary, based on the situation and the commander's desires.

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.75 LOCATE DEFILADE AND OBSERVABLE AREAS FROM VISIBILITY DIAGRAM

CONDITION(S): Given the target production map, the visibility overlay, target acquisition visibility diagrams, plotting equipment, and an assistant.

STANDARD: The Marine must locate defilade and observable areas by transferring visibility diagrams to a visibility overlay, per the references.

PERFORMANCE STEPS:

1. Plot the visibility diagrams on the visibility overlay.
2. Identify all defilade areas.
3. Recommend moving target acquisition assets to reduce the defilade areas.

REFERENCE(S):

1. FM 6-20-40, Fire Support For Brigade Operations (Heavy)
2. FM 6-20-50, Fire Support For Brigade Operations (Light)
3. FMFM 2-7, Fire Support in MAGTF Operations
4. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.76 PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE QUICK CRATERS

CONDITION(S): Given a tactical or nontactical situation, under all weather conditions, a Low-angle fuze quick artillery crater (or mock-up TD 6-7-8), a declinated aiming circle or M2 compass (preferred), or a lensatic compass, D-1 stakes (at least two stakes, 4 feet long -- four stakes would cover any crater analysis situation), WD-1 (communication wire) or a length of rope, wire, or string, a map (1:50,000 scale) of local area, and plotting equipment.

STANDARD: The Marine must perform a complete crater analysis and must report information, per the references.

PERFORMANCE STEPS:

1. Verify crater formed by low-angle fuze quick. Look for side spray and fuze funnel.
2. Determine the grid of the crater.
3. Determine the direction to the hostile weapon using fuze furrow or side spray method.
4. Collect usable shell fragments.
5. Send shell fragments and information to S-2 and/or appropriate agency.

REFERENCE(S):

1. FM 6-50, The Field Artillery Cannon Battery
2. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. FMFM 6-8, Supporting Arms Observer, Spotter, and Controller
4. FMFM 6-9, Marine Artillery Support
5. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook: Cannon Artillery

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.77 PERFORM CRATER ANALYSIS FOR LOW-ANGLE FUZE DELAY CRATERS

CONDITION(S): Given a tactical or nontactical situation, under all weather conditions, a usable fuze furrow, a declinated aiming circle or M2 compass (preferred), or a lensatic compass, D-1 stakes (at least two stakes, 4 feet long -- four stakes would cover any crater analysis situation), WD-1 (communication wire) or a length of rope, wire, or string, a map (1:50,000 scale) of local area, and plotting equipment.

STANDARD: The Marine must perform a complete crater analysis and must report information, per the references.

PERFORMANCE STEPS:

1. Verify crater formed by low-angle fuze delay.

- 2. Determine grid to center and direction to firing piece using proper method.
- 3. Collect usable shell fragments.
- 4. Send shell fragments and information to S-2 and/or appropriate agency.

REFERENCE(S):

- 1. FM 6-50, The Field Artillery Cannon Battery
- 2. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 3. FM 6-8, Supporting Arms Observer, Spotter, and Controller
- 4. FMFM 6-9, Marine Artillery Support
- 5. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook: Cannon Artillery

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.78 PERFORM CRATER ANALYSIS FOR HIGH-ANGLE CRATERS

CONDITION(S): Given a tactical or nontactical situation, under all weather conditions, a usable high-angle crater, a declinated aiming circle or M2 compass (preferred), or a lensatic compass, D-1 stakes (at least two stakes, 4 feet long -- four stakes would cover any crater analysis situation), WD-1 (communication wire) or a length of rope, wire, or string, a map (1:50,000 scale) of local area and plotting equipment.

STANDARD: The Marine must perform a complete crater analysis and must report information, per the references.

PERFORMANCE STEPS:

- 1. Verify crater formed by high-angle. Look for a deep fuze tunnel and back spray.
- 2. Determine grid of the crater.
- 3. Determine direction to hostile weapon using proper procedures.
- 4. Collect usable shell fragments.
- 5. Send shell fragments and information to S-2 and/or appropriate agency.

REFERENCE(S):

- 1. FM 6-50, The Field Artillery Cannon Battery
- 2. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
- 3. FM 6-8, Supporting Arms Observer, Spotter, and Controller
- 4. FMFM 6-9, Marine Artillery Support
- 5. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook: Cannon Artillery

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.79 PERFORM SHELL FRAGMENT ANALYSIS

CONDITION(S): Given a tactical or nontactical situation, under all weather conditions, a Curvature template (to scale), Defense Intelligence Agency (DIA) Projectile Fragmentation Identification Guide, Dividers, a ruler, and fragments and pieces of the projectile.

STANDARD: The Marine must perform a complete shell fragment analysis and must report information, per the references.

PERFORMANCE STEPS:

1. Collect and analyze shell fragments.
 - a. Determine the type of shell (e.g., mortar, rocket, artillery).
 - b. (Low order burst or dud). Determine caliber of shell using curvature template.
 - c. (High order burst). Determine caliber of shell using pieces of fins, rotating bands, or gas check bands and referring to the DIA Projectile Fragmentation Identification Guide.
2. Tag usable fragments. Tag must contain:
 - a. Location of crater.
 - b. Direction to hostile weapon.
 - c. Date-time group of shelling.
3. Send information and shell fragments to commander, FDC or S-2.
4. Make the proper report to S-2.
 - a. Report grid location.
 - b. Report direction to firing guns.

REFERENCE(S):

1. FM 6-50, The Field Artillery Cannon Battery
2. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition
3. FM 6-8, Supporting Arms Observer, Spotter, and Controller
4. FMFM 6-9, Marine Artillery Support
5. ST 6-50-20, Battery Executive Officer's/Platoon Leader's Handbook: Cannon Artillery

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: ANGL.5.80 SUBMIT STANDARD SHELLING, MORTARING, AND BOMBING REPORT

CONDITION(S): Given a standard report format (SHELREP), and a brief situation.

STANDARD: The Marine must complete a standard report (SHELREP) within 5 minutes, per the references.

PERFORMANCE STEPS:

1. Complete standard report.
2. Send to next higher headquarters.

REFERENCE(S):

1. FM 6-121, Tactics, Techniques, and Procedures for Field Artillery Target Acquisition

2. FMFM 6-18, Techniques and Procedures for Fire Support Coordination

ADMINISTRATIVE INSTRUCTIONS: (NONE)

Appendix A to
ENCLOSURE (6)